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In the

Supreme Court of the United States

OCTOBER TERM, 1974

UNITED STATES OF AMERICA,

Plaintiff,

v.

STATE OF LOUISIANA, ET AL.,

Defendants.

APPENDIX I TO THE EXCEPTIONS OF THE STATE OF LOUISIANA TO THE REPORT OF THE SPECIAL MASTER FILED JULY 31, 1974, AND BRIEF IN SUPPORT OF EXCEPTIONS

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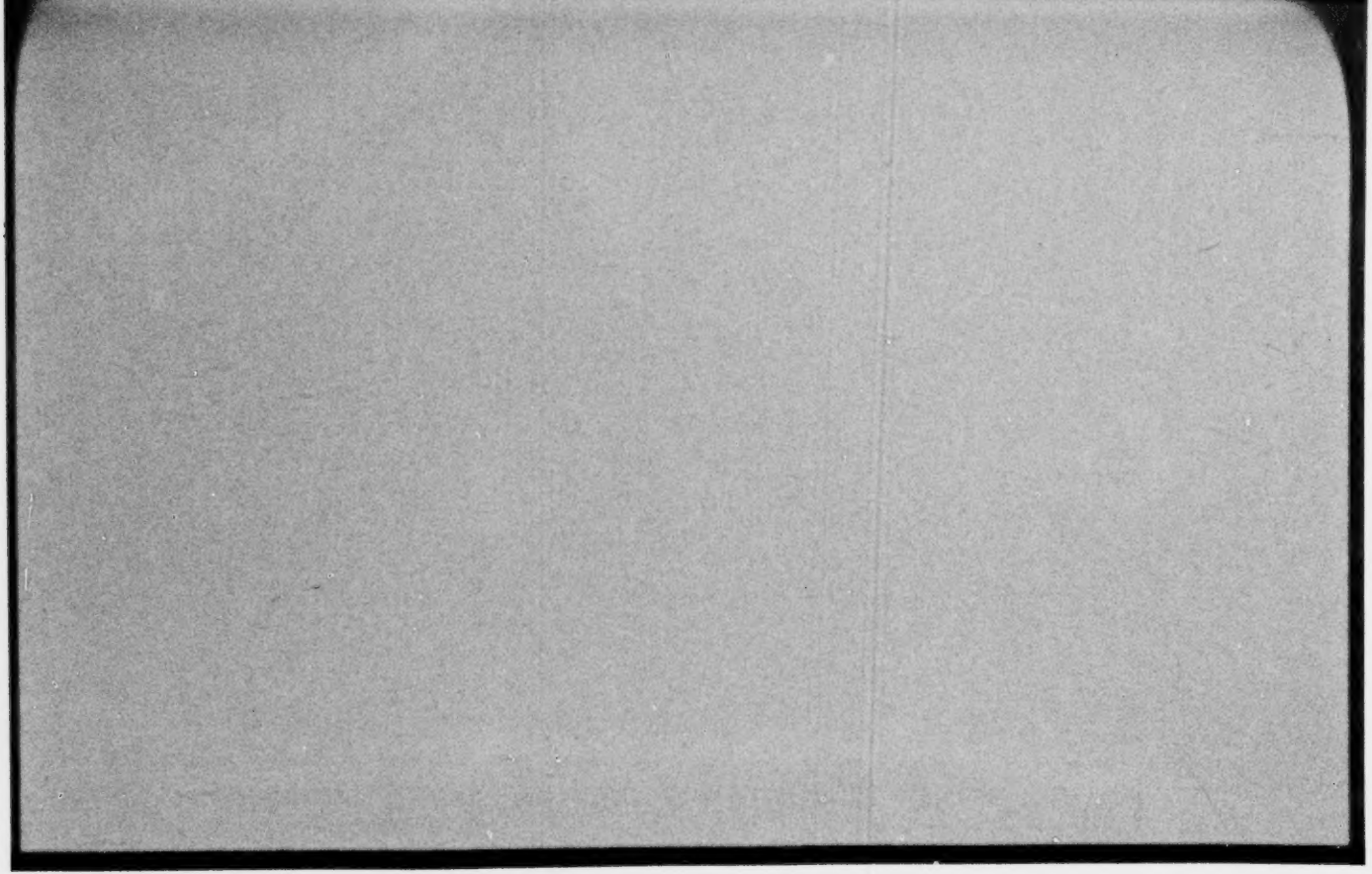

TABLE OF CONTENTS

General Indices ..... i-xxxi

Subject Index ..... i-xiv
Cases ..... xv-xvii
Statutes and Treaties ..... xvii-xix
Miscellaneous ..... xix-xxi
Louisiana Exhibits ..... xxi-xxx
United States Exhibits ..... xxx-xxxi

Errata to Louisiana's Motion and Memorandum Dated May 13, 1974 1-3

Memorandum in Support of Motion to Clarify, Amend and Supplement Findings of Fact and Conclusions of Law in the Draft of the Proposed Report of the Special Master (May 13, 1974) 5-57

Appendix A to Louisiana's Motion and Memorandum Dated May 13, 1974 59-126
Table of Contents by Subject 59
Index to Appendix A 60-62
Body of Appendix A 63-126

Appendix B to Louisiana's Motion and Memorandum Dated May 13, 1974 (Syllabus of Proposed Findings) 127

Motion to Clarify, Amend and Supplement Findings of Fact and Conclusions of Law in the Tentative Draft of the Proposed Report of the Special Master (Proposed Findings) 129-313

INDICES TO MOTION TO CLARIFY, AMEND AND SUPPLEMENT FINDINGS OF FACT AND CONCLUSIONS OF LAW IN THE TENTATIVE DRAFT OF THE PROPOSED REPORT OF THE SPECIAL MASTER AND MEMORANDUM IN SUPPORT THEREOF

Subject Index

A

Page

Acquiescence to Louisiana's claims
by foreign governments
in Caillou Bay 42, 46, 208, 209
in East Bay 17, 20, 46, 163-165, 168, 169
in other Mississippi Delta Bays 17, 46, 182,183
by the United States
in Caillou Bay 36, 44, 46-47, 208-210
in East Bay 17-18, 46-47, 163-165, 168
in other Mississippi Delta Bays 182, 183
Acts of Louisiana
concerning Caillou Bay
assertion of ownership and title 31, 42, 46-48, 205, 206
provision for leasing 47, 206
regulation of oyster fishing 47, 205
regulation of shrimping 47, 206
concerning East Bay
assertion of ownership and title 18, 27, 31, 32, 155-156, 157
assertion of ownership of salt water shrimp 157
prevention of pollution 160
regulation of oyster fishing 20-21, 27, 155

Page
regulation of shrimping 20, 157
concerning other Mississippi Delta Bays
assertion of jurisdiction 180, 181
assertion of title 180, 181
regulation of shrimping 180
concerning Shell Keys 211
Arrests of foreign vessels by Louisiana
in East Bay 18, 160
in other Mississippi Delta Bays 18, 181
Artificial modifications made at
East Bay *see* East Bay
Ascension Bay 276-283
Assimilation of islands and low-water
elevations to mainland
islands (other than mudlump islands)
at Caillou Bay 291-300
mudlumps
in general 176-178
at North Pass 254-258
at Pass a Loutre 260-262
at South Pass 231-234
at Southeast Pass 264-269
Atchafalaya Bay 308-312

B

Bays (*see also* Juridical Bays, Mississippi Delta Bays, specific proper names and United States)
closing lines
international law principles
prior to 1918 130-131
qualification under Convention on the
Territorial Sea and Contiguous

Page

Zone *see* discussion of particulars under each bay or Convention
ten-mile limit 8, 10-11, 14, 132, 186-187
twenty-mile limit 11, 132-145
United States position, 1918-1948 .....12, 132-145
interdistributary growth cycle 174-175
islands within, treatment of 245-248
land-locked characteristics
see also Convention, Art. 7(2)
U. S. position, 1918-1948 .....9, 13, 132-145
low-water elevations within, treatment of 245-248
overlarge
Ascension Bay 276-283
Atchafalaya Bay 308-312
Bisector-of-the-angle method of natural entrance point selection *see* Natural entrance points
Blind Bay
assimilation of mudlumps 260-262
historic claims *see* Mississippi Delta Bays
juridical bay qualification 262-264
Bucket Bend Bay
alternative closing lines 258-260
assimilation of low-water elevations at North Pass 254-258
historic claims *see* Mississippi Delta Bays
qualification as a juridical bay 258
Bull Bay 258

C

Caillou Bay
admission by U. S. as to inland

Page
water status 36, 44, 184-200
cartographic history 286-287
historic economic exploitation
by surrounding residents 202-204
historic geographic integration
with surrounding landforms 44-45, 202-204
historic need for control by
surrounding residents 202-204
island assimilation to mainland 291-300
juridical bay qualification 184-200, 285-286, 301-304
alternative claims 304-305
screening islands 305-308
well-marked headlands 285-286
jurisdiction by Louisiana since
1812 .....35, 47, 204-208
land areas omitted from Set of 54
Maps, existence of 287-290
prejudice to Louisiana's claims
by United States' action 35-37, 41, 200-202
by United States Supreme
Court's action 201
recognition of bay status by
United States 36-40, 43, 186-187
Charts
changes made in East Bay 13
distinguished from maps 273-275, 283-285
effect of land forms shown thereon 283-285
Closing lines *see* Bays
Convention on the Territorial Sea and
Contiguous Zone
Art. 7(2) qualification
Blind Bay 262-264

Page
Bucket Bend Bay 254-260
Caillou Bay 301-304
East Bay 220-231, 234-236
Garden Island Bay 269-271
Redfish Bay 269-271
Art. 7(3) qualification
Caillou Bay 305-308
Art. 7(5) qualification
Ascension Bay 276-283
Atchafalaya Bay 308-312
Art. 7(6) qualification 29-35, 37-39, 46
see also historic references under proper name of each bay
Cook Inlet, comparison to East Bay *see* East Bay
Corps of Engineers
artificial changes made at East Bay 145-150
Cowhorn Island, existence of 53-55, 229-231, 237-241

D

Disclaimers by United States
absence of in Caillou Bay to 1968 ..... 37, 208-210
effect of
as discussed in Cook Inlet case 16
Caillou Bay 37-39, 210
East Bay 8-10, 15-16, 170-172
Mississippi Delta Bays 184

E

East Bay
acquiescence to Louisiana's claims *see* Acquiescence

Page

acts of Louisiana concerning *see* Acts
artificial modifications 145-150
changes in configuration (historic) 145-150
comparison with Cook Inlet 19-21, 26
deterioration of Joseph Bayou landform 51-53, 250-254
disclaimers by U. S. *see* Disclaimers
historic economic exploitation by surrounding residents 150-154
historic geographic integration with surrounding landforms 14-15, 150-154
historic need for control over by surrounding residents 150-154
juridical bay qualification
until 1918 .....8-10, 129-132
1918-1948 .....9, 132-145
closing line A to 1950 .....12, 220-221
closing line A to 1956 .....9, 14, 53, 221-224
closing line B' to 1962 .....53, 225-229
closing line C to 1969 231
closing line A to present 234-236
closing line B to present 52, 236-237
closing line B' to present 241
closing line C to present 241-242
closing line D to present 242
natural entrance points 12, 220-221
semicircle test requirements *see* Semicircle test
sovereignty, exercizes of by Louisiana *see* Sovereignty
United States, recognition of the inland water status of 8
water area measurement *see* Semicircle test

F

Page

Florida Keys
compared to Isle Derniere 55-57, 297-300
compared to Shell Keys 210-220

G

Garden Island Bay
historic claims *see* Mississippi Delta Bays
mudlump assimilation problems 264-269
qualification as a juridical bay 269-271

H

Headlands
Ascension Bay 276-283
Caillou Bay 285-286, 304-305
East Bay 220-221, 225-234

I

Inland waters (*see also* proper names of bays and United States)
Caillou Bay, status of waters
admitted by United States 36, 44, 184-200
claimed by Louisiana 204-208
recognized by United States Supreme Court 184-200
claims distinct from territorial waters .....6-7(fn.), 163-170
East Bay, United States recognition 18
Shell Keys 210-220
Innocent passage 25-28
International Law (*see also* Convention on the Territorial Sea and Contiguous Zone)

Page

bay closing lines
prior to 1918 130-131
U. S. position, 1918-1948 ..... 12, 132-145
principles recognizing Caillou Bay as a bay 21, 184-200
territorial waters distinguished from inland waters 21-30
Islands
assimilation to mainland
at Caillou Bay 291-300
mudlumps 176-178
at Pass a Loutre 260-262
at South Pass 231-234
at Southeast Pass 264-269
existence of, effect 264-269
screening 308-312
within bays, treatment of 245-248
Isle Derniere
assimilation to mainland 291-297
comparison to Florida Keys 55-57, 291-297

J

Jetties
at South Pass 11, 145-150
at Southwest Pass 11, 145-150
Juridical Bays
Ascension Bay 276-283
as determined by Convention *see* Convention on the Territorial Sea and Contiguous Zone
Atchafalaya Bay 308-312
Blind Bay 262-264
Bucket Bend Bay 258
Caillou Bay *see* Caillou Bay

Page

delimitation, synopsis of U.S.
policy prior to 1948 132-145
East Bay *see* East Bay
Garden Island Bay 269-271
Redfish Bay 269-271
Jurisdiction (*see also* Sovereignty)
acquiescence in assertion of
Caillou Bay 36, 44, 47, 208-210
East Bay 17, 47, 163-170
Mississippi Delta Bays 182-184
Shell Keys 210-220
disclaimers to by U. S.
Caillou Bay 37-39, 210
East Bay 8-10, 16, 170-172
Mississippi Delta Bays 184
exercize by Louisiana since 1812 in
Caillou Bay 35, 47, 204-208
open, apparent exercize of in
East Bay 18, 27, 163-170
point-to-point basis of in Mississippi
Delta Bays 45, 47, 179-182

L

Land-locked *see* Headlands
Louisiana Acts *see* Acts of Louisiana
Low-water elevations
assimilation to mainland
at North Pass 254-258
at Pass a Loutre 260-262
existence of at South Pass,
effect 275-276
within bays, treatment of 245-248

M

Maps *see* Set of 54 Maps

Page

Mineral leases
Caillou Bay 204-208
East Bay 154-162
Mississippi Delta Bays 179-182
Mississippi Delta Bays (other than East Bay)
acquiescence to Louisiana's claims *see* Acquiescence
disclaimers of U. S. *see* Disclaimers
geographic configuration prior to suit 174-175
historic economic exploitation by surrounding residents 178-179
historic geographic integration with surrounding landforms 14, 178-179
historic need for control of by surrounding residents 178-179
jurisdiction asserted on a point-to-point basis 179-182
Mudlumps
assimilation to mainland 174-175
at North Pass 254-258
at Pass a Loutre 260-262
at South Pass (#93) 231-234
at Southeast Pass 264-269
existence of at South Pass
#93 273
#94 271-273

N

Natural entrance points (*see also* Headlands)
bisector-of-the-angle method of determination 229-231
East Bay
closing line A 9, 11, 14, 220-221
closing line B[1] 53, 229-231

Page

North Pass, assimilation of low-water elevations 254-258

O

Overlarge bays *see* Bays
Oyster leases
Caillou Bay 47, 204-208
East Bay 20-21, 27, 154-162
Mississippi Delta Bays 179-182

P

Paddy Bay 258
Planimetry, methods of for meeting Semicircle test
Method 1 (known as conservative method) 242-245
Method 2 ..... 51-53, 236-237
Method 3 ..... 51-53, 234-236
Pollution control in East Bay 154-162
Protest, absence of by foreign governments after arrests 20, 163-170

R

Redfish Bay
historic claims *see* Mississippi Delta Bays
mudlump assimilation 264-269
qualification as a juridical bay 269-271
Resurvey by U. S. in 1970, effect of 285

S

Semicircle test
East Bay meets test
closing line A to 1950 ..... 12, 220-221
closing line A to 1956 ..... 9, 14, 53, 221-224
closing line B' to 1962 ..... 53, 229-231

Page

closing line C to 1969 231
closing line A to present 234-236
closing line B to present 52, 236-237
closing line B' to present 241
closing line C to present 241-242
closing line D to present 242
methods of water area measurement (*see also* Planimetry)
conservative (Method 1), use of 242-245
treatment of tributary waters (Method 2) 248-250
U. S. position on 1918-1948 132-145
Set of 54 maps
correctness of land forms shown thereon 283-284
distinguished from charts 273-275, 283-284
effect of 273-275
inadequacy of 200-202
omissions at Caillou Bay 287-291
Shell Keys
assertion of jurisdiction by Louisiana Acts 210-220
inland water status recognized by U. S. to 1961 210-220
Shrimp
ownership 154-162
restrictions on fishing
Caillou Bay 47, 204-208
East Bay 20, 154-162
Mississippi Delta Bays 179-182
South Pass
jetties 145-150
mudlumps
effect of 273-279

Page

existence of
#93 273
#94 271-273
Southwest Pass, jetties 145-150
Sovereignty, exercises of by Louisiana
Caillou Bay
enforcement of jurisdiction ..... 6-7(fn), 31 42, 46-48, 205-206
fishing licensing 205
mineral leasing ..... 6-7(fn), 47, 206
oyster leasing ..... 6-7(fn), 47, 205
shrimp regulating 47, 206
East Bay
arrest of foreign vessels 18, 20, 31, 32, 160
comparison with Cook Inlet case 19-21
fishing licensing 20, 159
mineral leasing ..... 6-7(fn), 18-19, 160-162
oyster leasing .. 6-7(fn), 18, 20-21, 27, 47, 155
pollution control 160
shrimping restrictions 20, 157
use of armed force to enforce .. 18, 27, 159-160
Mississippi Delta Bays
arrest of foreign vessels 18, 181
fishing licensing 181
mineral leasing 181-182
oyster leasing 179-180
shrimping restrictions 180
Subsidence - deterioration of Joseph Bayou landform 51-53, 250-254

T

Territorial waters, distinguished from inland waters 21-30, 163-170

Page

Tributary waters, use in water area measurement 49-51, 248-250

U

United States
absence of disclaimer to Caillou Bay claims to 1968 208-210
acquiescence to Louisiana's historic claims
East Bay 163-170
Mississippi Delta Bays 182-184
disclaimers, effect of
Caillou Bay 210
East Bay 170-172
Mississippi Delta Bays 184
position as to bay closing lines, 1918-1948 .....9, 13, 132-145
prejudice to Louisiana's claim at Caillou Bay shown....35-37, 41, 200-202
recognition of the inland water status of
Caillou Bay 40, 184-200
Shell Keys 210-220
resurvey in 1970, effect of 285
synopsis of policy re: juridical bay delimitation prior to 1948 132-145
U. S. Army Corps of Engineers *see* Corps of Engineers

W

Water area measurement *see* Semicircle test
Well-marked *see* Headlands

Citations

CASES:

Page

The Anna
5C. Rob. 373 (1805) 177, 178

Louisiana Boundary Case,
See United States v. Louisiana, 394 U. S. 11

Louisiana v. Mississippi, 202 U.S. 1 (1906)..... 178

Manchester v. Massachusetts, 139 U. S. 240
(1890) 65, 188

North Atlantic Coast Fisheries Case, (*Great Britain v. United States*) (1910) Hague Court Reports .....10(fn), 14, 67, 130, 132, 279

Pollard's Lessee v. Hagan, 44 U.S.
(3 How.) 212 (1845) ..6, 7(fn), 95, 155, 179, 205

Post Office v. Estuary Radio, Ltd.
(Thames Estuary Case) 3 All.
E. R. 663 (1967) 49, 245, 249

Skiriotes v. Florida, 313 U. S. 69 (1941) 157

Stetson v. United States, No. 3993
Class 1, (1885) 29

United Kingdom v. Norway,
(Anglo-Norwegian Fisheries Case) I. C. J. Reports (1951) .....10(fn), 33, 141, 142, 143

United States v. Alaska, (Cook Inlet Case),
Civil, No. A-45-67 (1972) ....13(fn), 16(fn), 17, 19, 26, 171

United States v. California, Report of the Special Master (1952) 77, 100, 102, 104

United States v. California, Brief for the United

Page

States in Answer to California's Exceptions to the Report of the Special Master, No. 5, Original (1963) 119

United States v. California, 381 U. S. 139 (1965) ....10(fn), 28, 41, 121, 126, 137, 138, 143, 170, 293, 297

United States v. California, California Supplemental Decree, 382 U. S. 448 (1966) 122, 227

United States v. California, 332 U.S. 19 (1947) 7, 8, 47, 77

United States v. Florida, Report of Albert B. Maris, Special Master, No. 52, Original (1974) 56, 91, 126, 188, 213, 218, 220, 269, 297

United States v. Louisiana, 340 U.S. 899 (1950) 104, 107

United States v. Louisiana, No. 11, Original, May 15, 1958, Brief for the United States in Support of Motion for Judgment on Amended Complaint 88, 193, 212

United States v. Louisiana, et al., 363 U.S., 1 (1960) ..... 37 (fn), 95, 96, 121, 124, 126, 155, 193, 205, 213, 297

United States v. Louisiana, (Louisiana Boundary Case) 394 U.S. 11..... 1, 7 (fn), 12, 14, 15, 16, 21, 22, 24, 25, 27, 34, 35, 36, 49, 50, 51, 126, 170, 175, 201, 243, 244, 247, 249, 254, 282, 290, 298, 300, 305

Page

Brief of the State of Louisiana in Support of its Motion for Entry of Supplemental Decree No. 2 ..... 152, 271

Brief for the United States on Cross Motions for the Entry of a Supplemental Decree as to the State of Louisiana (No. 2) .. 199, 288

Memorandum in support of the Motion of the United States in opposition to the Motion of the State of Louisiana (1968) .. 37, 123, 288

United States v. Louisiana, No. 9, Original 123

Louisiana Brief (1973)

Vol. I, Part 1 200

Vol. II, Part 1 149

Vol. III, Part 3 ..... 238, 251, 252, 253

Vol. IV, Part 3 ..... 220, 223, 236

Vol. V, Sealed brief 202

Vol. V, Part 4 177

Vol. V, Part 5 ..... 277, 278, 280, 281

Vol. V, Part 6 ..... 295, 296, 301, 302, 303, 305, 306, 308

Vol. VIII, Appendix J 271

Louisiana memorandum presenting additional technical data and information requested by the Special Master at October 29, 1973, conference .. 233, 251, 273, 291

Louisiana Reply Brief 54, 133, 135, 190, 236, 262, 277, 280, 283, 292

Memorandum for the United States in Support of Oral Argument before the Special Master 294

STATUTES AND TREATIES:

Alaskan Boundary Arbitration of 1904 178

Geneva Convention on Territorial Sea and

Page

Contiguous Zone, 15 U.S.T. .....6(fn), 9, 29, 37, 39, 41, 42, 46, 97, 100, 101, 105, 123, 125, 130, 137, 223, 226, 230, 241, 242, 244, 245, 262, 269, 280, 299, 306

Internal Revenue Regulations, No. 60 § 2201, Reg. 2 137

Louisiana Acts:

Act 18 of 1870 155
Act 106 of 1886 .....155, 205
Act 110 of 1892 .....155, 205
Act 153 of 1902 .....155, 156, 205
Act 52 of 1904 .....36, 155, 206
Act 189 of 1910 .....157, 206
Act 245 of 1910 .....157, 206
Act 30 of 1915 182
Act 52 of 1921 .....164, 183
Act 103 of 1926 157
Act 315 of 1926 182
Act 108 of 1926 180
Act 68 of 1932 160
Act 367 of 1940 160
Act 143 of 1942 180
Act 51 of 1948 157
Act 385 of 1948 160
Act 386 of 1948 160
Act 38 of 1956 124

North Atlantic Coast Fisheries Arbitration, (September 7, 1910) .....10(fn), 14, 67, 130, 132, 279

Migratory Bird Treaty Act (1918) 158

Submerged Lands Act (1953) 9, 13, 36, 37, 38, 46, 125

Page

United States Statutes
40 Stat 755 ..... 164, 183
41 Stat 305 136
43 Stat 98 164
45 Stat 1222 164

MISCELLANEOUS:
Alaskan Boundary Arbitration of 1904 178
Billiot, Joseph 158, 160, 161, 168, 181, 203, 207, 209
Boggs, S. W., "Delimitation of the Territorial Sea, the Method of Delimitation Proposed by the Delegation of the United States at the Hague Conference for the Codification of International Law" *American Journal of International Law*, Vol. 24 (July, 1930) ....74, 76(fn), 139(fn)
Bouchez, Dr. Leo 14
Buttorff, Curtis 271, 273, 290
Charney, Jonathan 282
Christmas, J. Y. 154, 204
Dobard, Christopher 153
Ensminger, Alan 51, 52, 158, 163, 251
Hague Conference on the Codification of International Law (1930) 13, 15, 43, 69, 100, 144, 185
The International Law of Bays, M. Strohl, *See* Strohl (1963)
Juridical Regime of Historic Waters, Including Historic Bays, U. N. Doc. A/CN. 4/143 (1962) 22, 23, 25, 26, 28, 30, 31, 32, 33
Larimore, Philip 282

Page

Lowery, Dr. George, Jr. 163, 164, 183, 211

Lubbe, Emanual Von 45, 153, 158, 159, 160, 168, 176, 181, 207, 209

Measurement of the United States Territorial Sea, By G. Etzel Pearcy, No. 1044 (June 29, 1959) ..91

Melamid, Dr. 231, 236, 237, 242, 254, 258, 260, 262, 301, 310 311

Miller, "Scope of the Theory of Historic Bays" (1958) 13

Moore, *Digest of International Law* 63, 118

Morgan, Dr. James O. 51, 52, 146, 149, 150, 154, 155, 172, 175, 176, 203, 205, 233, 234, 248, 249, 251, 256, 264, 266, 272, 273, 277, 279, 280, 281, 283, 293, 294, 303, 310

Morgan, David J. 303, 304

Nunez, Samuel J. 158, 159, 168, 176, 181

Poret, Ory 162, 182

Proudfoot, *Measurement of the Geographic Area of the United States*, Department of Commerce (1946) .....9(fn), 18(fn), 20, 43, 44, 75, 138, 166, 167, 191, 192

Richardson, James 203, 221, 238, 241, 266, 293

Schouest, Abraham deposition of .....32(fn), 45, 153, 158, 159, 181

Scott, *The Hague Court Reports* 67, 131, 133, 279

Shalowitz, A. L. *Shore and Sea Boundaries*,

Page

Vol. 1 ..... 44, 49, 50, 77, 107, 109, 111, 137, 138, 141, 192, 193, 197, 221, 225, 227, 235, 236, 242, 248, 279
Vol. 2 ..... 152, 176, 286, 287

Southard, R. B. 296

Strohl, M. *The International Law of Bays* (1963) 77, 225

Truman Proclamation of 1945 ..... 162, 182, 204

Whitaker, Philip 231, 236, 237, 242, 258, 260, 282, 303, 305, 311, 312

Whiteman, *Digest of International Law* 63, 78, 79, 81, 83, 84, 85, 86, 87, 91

Wilson, Joseph K. 240

Yearbook of the International Law Commission
(1956) 86
(1955) 84
(1953) 79, 81, 82
(1952) 78, 81

Exhibit References

La. Exh. 4 ..... 172, 175, 251, 280

La. Exh. 5 ..... 172, 174, 175, 251

La. Exh. 6 ..... 149, 176, 231, 232, 233, 260, 271, 272, 273, 274

La. Exh. 7 ..... 172, 248, 256

La. Exh. 8 ..... 153, 154, 160, 176, 177, 181, 231, 236, 238, 249, 250, 251, 254, 260, 262, 264, 269, 273, 275, 283, 284

Page

La. Exh. 9 ..... 51, 251, 253

La. Exh. 10 ..... 146, 176, 233, 260, 262, 266, 271, 272, 273

La. Exh. 11 ..... 176, 273

La. Exh. 12 ..... 176, 262, 264, 269, 272, 273

La. Exh. 13 262

La. Exh. 14 262

La. Exh. 15 262

La. Exh. 16 262

La. Exh. 17 262

La. Exh. 18 171

La. Exh. 21 ..... 152, 176

La. Exh. 22 ..... 134, 220, 275, 276, 283, 284

La. Exh. 23 ..... 8, 130, 153, 251 283

La. Exh. 23A ..... 9, 11(fn), 132, 133, 134, 144, 145, 146, 149, 150, 152, 155, 156, 172, 174, 220, 221, 223, 224, 225, 235, 244

La. Exh. 25 ..... 177, 262, 264

La. Exh. 26 ..... 244, 258

La. Exh. 26A 258

La. Exh. 28 ..... 163, 183

La. Exh. 28(2) 163, 183

La. Exh. 28(26) 211

La. Exh. 28(27) 164, 183, 211

Page

La. Exh. 30 ..... 164, 183

La. Exh. 33 251

La. Exh. 34 251

La. Exh. 35 251

La. Exh. 50 ..... 188, 202, 203, 285, 286, 287 291, 293, 294, 299, 303, 304

La. Exh. 52 ..... 9(fn), 18(fn), 167, 186, 300

La. Exh. 52(1) 21, 44, 75, 138, 140, 166, 167, 171, 191, 192, 212

La. Exh. 53 169

La. Exh. 55 ..... 201, 206, 211

La. Exh. 55(1) 156, 179, 205, 209

La. Exh. 55(2) 156, 180

La. Exh. 55(3) 156, 180, 205

La. Exh. 55(5) 156, 206

La. Exh. 55(6) 156, 180, 206

La. Exh. 55(8) 157, 180, 206

La. Exh. 55(168) 157, 208

La. Exh. 55(173) 157, 180

La. Exh. 55(177) 180

La. Exh. 55(179) 157

La. Exh. 58 ..... 17(fn), 162, 208

La. Exh. 59 160

La. Exh. 69 180

La. Exh. 70 180

Page

La. Exh. 72 180

La. Exh. 73 ..... 17(fn), 180

La. Exh. 75 206

La. Exh. 76 206

La. Exh. 77 211

La. Exh. 86 208

La. Exh. 88 182

La. Exh. 89 182

La. Exh. 90 182

La. Exh. 91 208

La. Exh. 92 162

La. Exh. 93 149

La. Exh. 94 149

La. Exh. 95 162

La. Exh. 96 ..... 201, 208

La. Exh. 98 ..... 163, 177, 182

La. Exh. 104 ..... 244, 277, 281, 282, 283

La. Exh. 121 ..... 233, 271, 272

La. Exh. 121(A) 273, 274

La. Exh. 122 176

La. Exh. 123 ..... 238, 241, 275

La. Exh. 124 ..... 151, 176, 238, 239, 275, 283, 284, 285

La. Exh. 133 ..... 234, 249, 250

La. Exh. 135 ..... 188, 204, 206, 285, 291, 293

La. Exh. 137 203

Page

La. Exh. 138 203

La. Exh. 139 203

La. Exh. 140 203

La. Exh. 141 203

La. Exh. 142 203

La. Exh. 144 203

La. Exh. 145 ..... 19, 158, 159, 160, 168, 176

La. Exh. 147 ..... 19, 153, 158, 159, 168, 181

La. Exh. 148 ..... 19, 153, 158, 159, 160, 168, 181, 207, 209

La. Exh. 149 19

La. Exh. 150 ..... 136, 152, 165

La. Exh. 151 ..... 172, 180, 188, 203, 206, 291

La. Exh. 153 249

La. Exh. 154 ..... 63, 91, 188, 306

La. Exh. 157 ..... 188, 203, 206, 285, 291, 293

La. Exh. 158 ..... 176, 180

La. Exh. 159 ..... 146, 149, 154, 176, 260

La. Exh. 160 176

La. Exh. 161 176

La. Exh. 162 ..... 176, 256

La. Exh. 163 176

La. Exh. 164 ..... 151, 176, 256

La. Exh. 165 ..... 176, 275, 276, 283, 284

La. Exh. 166 ..... 176, 275, 276, 283

La. Exh. 167 ..... 176, 260, 275, 276, 283

Page

La. Exh. 168 .....151, 176, 256, 275, 283

La. Exh. 169 .....154, 176, 180

La. Exh. 170 .....146, 176, 180

La. Exh. 171 .....188, 285, 293

La. Exh. 172 136

La. Exh. 176 193

La. Exh. 177 146

La. Exh. 178 .....37, 41(fn), 96, 99, 101, 103, 137, 138, 187, 194, 196, 197, 198, 216, 217, 218, 288

La. Exh. 180 .....152, 225, 226, 227, 229, 230, 231, 244

La. Exh. 181 294

La. Exh. 181D 301

La. Exh. 184X 271

La. Exh. 185A 205

La. Exh. 185B 291

La. Exh. 186 .....285, 291, 293

La. Exh. 188A 296

La. Exh. 193C 273

La. Exh. 193Y-AB 251

La. Exh. 194 .....244, 309, 310, 311, 312

La. Exh. 196 .....188, 203, 285, 291, 293

La. Exh. 197 .....52, 222, 223, 227, 231, 234, 235, 236, 237, 241, 242, 249, 250

La. Exh. 198 .....188, 202, 205, 244, 287, 293, 303, 304, 305, 306, 308

Page

La. Exh. 199 193

La. Exh. 199A 193

La. Exh. 202 ..... 188, 293

La. Exh. 203 ..... 291, 293

La. Exh. 204 238

La. Exh. 205-206 238

La. Exh. 207 ..... 188, 238, 285, 293

La. Exh. 208 ..... 238, 293

La. Exh. 209 ..... 238, 293

La. Exh. 210-214 238

La. Exh. 215 ..... 188, 206, 238, 285, 291, 293

La. Exh. 216 ..... 233, 238, 267

La. Exh. 229 ..... 132, 221, 223, 231, 236, 237, 258, 279, 303

La. Exh. 230 ..... 132, 279

La. Exh. 231 258

La. Exh. 232 303

La. Exh. 234 ..... 231, 236, 237

La. Exh. 237A-C 279

La. Exh. 238 132

La. Exh. 240 ..... 132, 180

La. Exh. 241 132

La. Exh. 242 223

La. Exh. 244 221

Page

La. Exh. 247 ..... 188, 205, 285, 291, 293

La. Exh. 255 ..... 234, 236

La. Exh. 256 ..... 152, 188, 291

La. Exh. 256A 180, 206, 285, 291, 293

La. Exh. 256B 206, 285, 291, 293

La. Exh. 256C 180, 206, 285, 291, 293

La. Exh. 256D 163, 206, 208, 285, 291, 293

La. Exh. 257 199

La. Exh. 258 ..... 152, 163, 183, 188, 208, 285, 291, 293

La. Exh. 268 ..... 188, 203, 285, 287, 291, 293, 294

La. Exh. 269 176

La. Exh. 270 ..... 163, 183, 188, 208, 285, 291

La. Exh. 272 ..... 146, 176

La. Exh. 273 ..... 146, 176

La. Exh. 274 ..... 152, 180, 188, 206, 285, 291, 293

La. Exh. 275 ..... 146, 176

La. Exh. 277 ..... 176, 275, 283, 285

La. Exh. 283(2) ..... 133(fn), 137

La. Exh. 283(4) 137

La. Exh. 283(10) 133, 131

La. Exh. 283(13) 233, 239, 240

La. Exh. 283(16) 200

La. Exh. 283(17) 245, 249

La. Exh. 283(20) ..... 40(fn), 93

Page

La. Exh. 284 153

La. Exh. 285 34

La. Exh. 286 ..... 193, 209

La. Exh. 293 ..... 176, 256, 275

La. Exh. 296 ..... 152, 234, 237, 260, 276

La. Exh. 299 251

La. Exh. 300 ..... 201, 287, 289, 290, 294, 295, 296, 307, 308

La. Exh. 302-320 289

La. Exh. 321 293

La. Exh. 322 293

La. Exh. 324 278

La. Exh. 325 68

La. Exh. 327 290

La. Exh. 328 150

La. Exh. 329 150

La. Exh. 331 295

La. Exh. 332 290

La. Exh. 333 ..... 289, 290

La. Exh. 334 290

La. Exh. 339 303

La. Exh. 340 ..... 176, 233, 262, 266

La. Exh. 341 251

La. Exh. 342 ..... 51, 233

La. Exh. 343 ..... 2, 251, 252

Page

La. Exh. 344 ..... 256, 257, 262, 263
La. Exh. 346 ..... 264, 266
La. Exh. 353 ..... 216, 217, 262
La. Exh. 356(3) 63
La. Exh. 356G 178
La. Exh. 374 291
La. Exh. 383 ..... 2, 252

U. S. Exh. 3 271
U. S. Exh. 10 289
U. S. Exh. 14 289
U. S. Exh. 20 289
U. S. Exh. 21 289
U. S. Exh. 30 289
U. S. Exh. 47 188
U. S. Exh. 74 ..... 69, 137, 138
U. S. Exh. 75 74
U. S. Exh. 93 ..... 77, 137, 141
U. S. Exh. 97 ..... 30, 89, 187
U. S. Exh. 99 ..... 23, 170
U. S. Exh. 102 143
U. S. Exh. 103 ..... 10(fn)
U. S. Exh. 108 ..... 29, 171

Page

U. S. Exh. 114 171

U. S. Exh. 116 288

U. S. Exh. 117 ..... 192, 193, 288

U. S. Exh. 118 193

U. S. Exh. 191 293

U. S. Exh. 200 ..... 234, 240, 241, 283

U. S. Exh. 202 ..... 218, 293, 294, 303, 304

U. S. Exh. 247 293

U. S. Exh. 257 ..... 289, 293

U. S. Exh. 258 ..... 289, 290

U. S. Exh. 259 290

U. S. Exh. 347 ..... 188, 205, 285, 287, 291

U. S. Exh. 348 188

U. S. Exh. 349 ..... 258, 259, 260

U. S. Exh. 355A 296

U. S. Exh. 374 ..... 231, 256, 257, 260, 262, 264, 266, 267, 268, 285, 286, 291, 294

U. S. Exh. 377 185

U. S. Exh. 377B 189, 191

U. S. Exh. 386 303

U. S. Exh. 387 ..... 310, 311

U. S. Exh. 389 354

U. S. Exh. 416D 171, 280, 293

U. S. Exh. 417 290

U. S. Exh. 418 290

No. 9, ORIGINAL

In the Supreme Court of the United States

OCTOBER TERM, 1973

UNITED STATES OF AMERICA,
Plaintiff,

v.

STATE OF LOUISIANA, ET AL.,
Defendants.

ERRATA TO LOUISIANA'S MOTION AND MEMORANDUM DATED MAY 13, 1974

Certain minor typographical errors occurred in Louisiana's May 13th filing and these errata are submitted as corrections thereof.

I.

In the Memorandum the following corrections are indicated.

1. At page 16, the citation for the quotation at the top of the page reading "394 U.S. 11, 78 n. 104" should read "394 U.S. 11, 77 n. 104."

2. At page 22, at the bottom of the top paragraph, the last sentence reading "Notes 28 and 30, 394 U.S. 11, 24, 30. . ." should read "Notes 28 and 30, 394 U.S. 11, 24, 26. . . ."

3. At page 38, the first line of the second quotation, beginning "On the same basis," the date "1948" should be "1958."

II.

In the Motion the following corrections are indicated:

1. At page 252, the first line, "From La. Exh. 383" should read "From La. Exh. 343."

2. At page 280, Finding 48.M, the first line, "The natural entrance points of Ascension Bay. . ." should read "The outer entrance points of Ascension Bay. . . ."

3. At page 281, Finding 48.N, the second line, "as natural entrance points" should read "as outer entrance points."

Respectfully submitted,

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PROOF OF SERVICE

I, the undersigned, authorized to act on behalf of the State of Louisiana, certify that copies of the foregoing Errata to Louisiana's Motion and Memorandum were hand delivered to Federal Counsel in Memphis, Tennessee, on May 27, 1974.

Frederick W. Ellis

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No. 9, ORIGINAL

In the Supreme Court of the United States

OCTOBER TERM, 1973

UNITED STATES OF AMERICA,

Plaintiff,

v.

STATE OF LOUISIANA, ET AL.,

Defendants.

MEMORANDUM IN SUPPORT OF MOTION TO CLARIFY, AMEND AND SUPPLEMENT FINDINGS OF FACT AND CONCLUSIONS OF LAW IN THE DRAFT OF THE PROPOSED REPORT OF THE SPECIAL MASTER

May it Please the Special Master:

Following the suggestions of the Special Master in his letter of February 21, 1974, Louisiana is filing with this memorandum a motion to clarify, amend and supplement findings of fact and conclusions of law contained in the tentative draft of the proposed report of the Special Master.

In the reference to the Special Master, the United States Supreme Court suggested primarily that the Special Master resolve certain factual issues and find facts on which the Court could base its final opinion in establishing the extent of Louisiana's claim under the Submerged Lands Act. Such being the Court's in-

struction, it is extremely important to Louisiana to have the Special Master find detailed undisputed facts on certain issues so that the Court may consider these factual determinations along with the conclusions drawn from the facts by the Special Master. This would obviate the necessity of the Court remanding to the Special Master issues for additional findings of fact if the Court disagrees with the conclusions reached by the Special Master on particular issues where all of the facts were not detailed in the Special Master's report.

In his draft, the Special Master commented on Louisiana's proof of historic waters, "As the United States does not dispute any of the factual evidence presented in support of these allegations, they must for purposes of this report be taken as true." [1] In view of

[1]This sentence follows the statement on pages 17 and 18, which reads as follows:

> "The State of Louisiana, however, insists that both before and after the Geneva Convention, it has exercised over certain, if not all, of the disputed areas sovereignty of a type consistent only with inland waters, and that there has never been any protest either by any foreign power or by the United States as to the exercise of this sovereignty. This consists of the granting by the State of Louisiana of certain oyster and mineral leases, the regulation by it of fishing in the waters in question, including the exclusion of unlicensed vessels and in at least one instance the arrest of foreign unlicensed fishermen in those waters, the enforcement of pollution control regulations in the area, and the protection of wildlife in the area by both the State of Louisiana and the United States."

While maintaining that the acts are consistent only with a claim of inland sovereignty, because, among other reasons, the Acts were done under a juridical basis (Pollard's Lessee

the undisputed evidence on Louisiana's historic bay claims, we suggest that the Master make detailed findings of fact on such to perfect the record for the Court.

We will first consider East Bay. In approaching Louisiana's historic inland water claim as to East Bay, it is necessary to consider what the Supreme Court said in referring this issue to the Special Master. The Supreme Court stated:

> It would be quite another to allow the United States to prevent recognition of a historic title which may already have ripened because of past events but which *is called into question for the first time in a domestic lawsuit*. The latter, we believe, would approach an impermissible contraction of territory against which we cautioned in United States v. California.[2]

This means that the Special Master must determine Louisiana's historic bay claim as to East Bay when Louisiana's claim was "called into question for the first time in a domestic lawsuit."

In determining when Louisiana's claim was first called into question, we refer to the Suggested Findings of Fact and Conclusions of Law filed by the United

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v. Hagan, 44 U.S. (3 How.) 212 (1845) which has been limited as appertaining only to inland waters (United States v. California 332 U.S. 19 (1947)), Louisiana disagrees with any implication that acts of sovereignty must be consistent *only* with inland classification to be effective in establishing an historic inland claim.

[2]United States v. Louisiana, 394 U.S. 11, 78, note 104, (emphasis added).

States with the Special Master by cover letter dated December 3, 1973, from which we quote:

> The United States has at all times in this litigation, since the filing of the first complaint in 1948, asserted that East Bay is not inland water within the operative meaning of that term in these proceedings. (Finding No. 6).

Accordingly, the Special Master should determine whether Louisiana's historic bay claim to East Bay had ripened into such ownership by past events at that time. Actions of the United States after that date in attempting to prevent recognition of such a historic title "would approach an impermissible contraction of territory against which we cautioned in United States v. California."

Louisiana has maintained that when Louisiana was admitted as a state in 1812, East Bay was a juridical bay. The United States, in its Findings of Fact and Conclusions of Law filed with the Special Master by cover letter dated December 3, 1973, admitted, in Finding No. 8:

> Before 1900, East Bay appears to have had such a configuration that its entrance did not exceed 10 miles in width. Since at least 1918, the entrance of the bay has been more than 10 miles wide. La. Exh. 23.

and further, in Finding No. 9, United States admits

> Nevertheless, if one applies the 10-mile closing rule until 1958[3] and the Convention on the Territorial Sea and the Contiguous Zone thereafter, East Bay, if once a true inland bay, ceased to be a juridical bay ever since at least 1918. See the Chapman Line of 1950 which did not enclose East Bay.[4]

The closing line of East Bay as a juridical bay to 1918 between the outer natural entrance points was 8.58 nautical miles wide. East Bay landward of this closing line contained 31,588 acres. The number of acres to satisfy the semicircle test amount to 24,502, being *7,086 acres* in excess of the semicircle test. This evidence is undisputed, as is the data showing East Bay satisfied the semicircle test and had a mouth between natural entrance points of barely 11 miles from 1918 to 1956. La. Exh. 23A, and Finding 1.C and 2.M.

It would thus appear that there is no dispute be-

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[3]United States v. California 389 U.S. 139 (1965) did *not* apply the 10-mile rule until 1958, but applied the Convention 24-mile rule and semicircle test retroactively, to determine the extent of inland waters acquired by California upon statehood in 1850 and the grant acquired under the 1953 Submerged Lands Act. The evidence is uncontroverted that at least until 1956 East Bay, between natural entrance points (Line A) clearly met the Convention tests, even by the most conservative area measurement systems. See Findings 1.C, 2.L, 21 and 22.

[4]But see the *Measurement of the Geographic Area of the United States*, Plate VIII, the congressionally sanctioned and still used study which did enclose East Bay. See Finding 6.I-N and La. Exh. 52.

tween the United States and the State of Louisiana that East Bay was a juridical bay at least until 1918, with a closing line of less than ten miles.[5] The law never restricted a bay to a width of ten miles [6] but never has

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[5]See U.S. Exh. 103, letter from Dean Rusk to Robert F. Kennedy, dated January 15, 1963, stating that *prior* to the December 10, 1951 ICJ decision in the Anglo-Norwegian Fisheries case, the United States followed the "so-called ten-mile rule for bays" (emphasis added) but thereafter sought adoption by the U. N. of a 10-mile limit. This letter of the Secretary of State thus indicates that this country, in foreign relations after December 10, 1951, recognized the ICJ Decision *rejecting* the "so-called" ten mile rule as having ever been international law. Certainly, the United States, outside of oil litigation, would not have lightly continued to advocate a position in foreign relations as law which a world tribunal had declared in violation of international law; nor is it conceivable that a distinguished statesman like Dean Rusk would have refused to recognize that the ICJ ruling was entitled to respect, even retroactively. Other evidence in the record of this case indicates that while perhaps advocating a "10-mile rule in international relations," this country recognized considerably greater bay closures (See Findings 1.B, 2.B, C, D and L).

[6]The North Atlantic Coast Fisheries Case, sometimes cited as the source of the so-called 10-mile rule, in fact *did not* hold that there was a ten-mile rule of law on bays, but merely recommended that the parties specifically agree on a 10-mile limit which they did, for only *some* of the bays in question, because of the *absence* of a defined bay size limit in international law. "[T]hese circumstances (certain prior agreements or proposals by Britain) are not sufficient to constitute this a principle of international law, it seems reasonable to propose this rule..." Hague Court Reports (1910), p. 188. It was still merely being proposed in 1956, and never became law. See United States v. California 381 U.S. 139, 163-165 (1965) applying Convention standards retroactively, due to the void of clear prior limits. Thus, as per Secretary Rusk's letter, U.S. Exh. 103, noted *supra*, and the evidence of the

the United States, even in its oil claims in this case, urged a lesser limit [7] for bay closing lines.

As noted above, we have shown that the "so-called" (as Dean Rusk styled it) 10-mile rule was not a rule at all, but only a rejected proposal. East Bay, from its very first appearance on charts until at least September 17, 1956, by the most conservative of area measurement methods (specifically the method approved by the Special Master) continuously qualified as a bay behind a line connecting its outer *natural* entrance points (not using the jetties), which only slightly exceeded ten miles after 1918. Although the Supreme Court stated that:

> East Bay does not meet the Semicircle test on a closing line between its seawardmost headlands—the tip of the jetty at Southwest Pass and the southern end of South Pass,

it did expressly hold:

> There is a line which can be drawn within

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charts until 1956. La. Exh. 23A, Findings 1.C, 2.L, 21 & 22 in the period 1951 to 1956, the United States was recognizing a width standard which when applied to East Bay, called for its classification as inland waters, for the closing line distance was barely 11 miles wide between natural entrance points on the August 22, 1955 chart, and was not significantly greater on any prior charts.

[7] A greater limit—a twenty-mile rule—was used by federal treasury and law enforcement officials, presumably for many years before and after a 1929 letter reflecting it. See finding 2.C. Of course, East Bay has never had a mouth even approaching twenty miles in width.

> East Bay, however, so as to satisfy the semicircle test. *United States v. Louisiana*, 394 U.S. 11, 53, 54.

The Supreme Court was right. The Court will need the Master's findings concerning data on the juridical status of East Bay during the entire period June 5, 1950 to the present to govern disposition of revenue from bonuses, rentals and royalty paid over the years. A ruling that the status from June 5, 1950 to 1956 is irrelevant would contradict the agreement of the parties on the need to decide the status of waters in East Bay since June 5, 1950 (Joint Pretrial Statement, Issues 6(3), p. 5). This is a matter of great materiality since many of the mineral leases were granted prior to 1956.

The factual findings requested by Louisiana on measurement data have been absolutely uncontested and inevitable conclusions are compelled by the data. See Findings 1, 2, 21, 22, and 26 with supporting references which cannot leave any doubt and are clearly compelled by the record: East Bay behind the closing line between its *natural* entrance points was always unquestionably an inland water body with a configuration that was recognized as a bay under international law, certainly at least between June 5, 1950 and 1956; and further, it was a bay by the principles the Supreme Court retroactively applied in the 1965 *California* decision and even a bay under principles retroactively recognized in foreign relations by the United States after December 1951. This is also true as to important

dates: in 1948, when for suspect reasons,* federal oil litigation claims over East Bay were first asserted for domestic purposes; in June 1950, the date for commencing accounting between the parties; as of the 1953 enactment of the Submerged Lands Act; and until 1956 when Chart 1272 was changed contemporaneously with the 1956 government motion for a governmental injunction to prevent drilling in East Bay and other offshore areas, which change should also be suspect.

Recognition of East Bay's long standing status as a juridical bay is also material and adds importance to Louisiana's claim to that waterbody as an historic bay. Under the principle urged by the United States at the Hague Conference in 1930 and recognized as the United States position in the U. N. Conference on the Law of the Sea which led to the 1958 Convention, and also recognized in testimony by international law experts in this case,

> Waters, whether called bays, sound, straits, or by some other name, which have been under the jurisdiction of the coastal state as part of its interior waters are deemed to continue as part thereof. (Statement of Mr. Miller, the representative of the United States of America, at the Hague Conference on the Codification of International Law in 1930 quoted as a part of the United States position under the approving heading, "Scope of the Theory of Historic Bays," in the Preparatory

*See Judge von der Heydt's findings in the Cook Inlet Case treated in findings 7.C-D, and in note 9 *infra*.

> Documents, Vol. I, Official Records U. N. Conference on the Law of the Sea 1958, U. N. Doc. A Conf. 13/37, at page 37.)
>
> But if you might have started even with a geographic bay but in fact as a result of change it ceased to be one but you continued to assert rights in those bays, and other people continued to recognize them, then you might have moved from, if you will, a geographic to an historic bay. Dr. Henkin, Tr. 4912-13.
>
> See testimony of Dr. Bouchez, Tr. 957-66.

We have shown elsewhere that the Supreme Court has deemed the indentations of the Mississippi Delta to have sufficient geographic characteristics to be considered as historic *bays*. See footnote 100, 394 U.S. 11, 75. We have more than demonstrated the correctness of the Court's approach by proving that by every standard, East Bay was geographically and legally a bay until at least 1956 behind a line connecting its outer natural entrance points.

Even after East Bay exceeded the ten-mile proposed limit commencing in 1918, if it had not been juridically an inland water body at its outer mouth, it was at least a geographical bay until 1956 behind its outer natural entrance points. The line met the semicircle test and a fallback line would have been appropriate, even under the *North Atlantic Coast Fisheries Arbitration* recommendation and the policy of the United States. See Findings 1 and 2, especially 2.L(3), 2.N, and Figure 3.

The nexus between the historic and geographic considerations simply cannot be ignored if the Supreme Court's views are to be followed. "Whether particular waters are inland has depended on historical as well as geographical factors." 394 U.S. 11, 23 (in the context of discussing the historic waters claims of Louisiana under the broad Coast Guard Line claim).

The principle announced that waterbodies once inland remain inland, accords with the Supreme Court opinion, for it is derived from historical geographical reasoning. Nor does the principle conflict with the ambulatory commentary of the Supreme Court, if mechanistic literalism is avoided and context considered. That ruling was *not* in the context of Mr. Miller's point that waterbodies, whether straits, sounds or bays, remain subject to the jurisdiction of a state once they fall under the jurisdiction of a state. Surely the Supreme Court has recognized that no amount of geographic change of the shoreline in an historic bay will change its legal status, since *continued* legal status is not *dependent* on *precise* present geography. ". . . other areas of water closely connected to the shore, although they do not meet any precise geographical test, may have achieved the status of inland waters by the manner in which they have been treated. . ." 394 U.S. 11, 23. *A fortiori*, if waters *had* formerly met precise geographical tests and had *also* been treated as a bay, failure to *continue* to meet precise geographic tests would be immaterial. Thus, the doctrine is traceable to the Court's language. Mr. Miller at the Hague was not speaking of mere changes of shoreline and related

three-mile projections from the shoreline; Mr. Miller was speaking of geographic entities *not* changing status.

The question after 1948, when the United States made its oil claims for East Bay as against the State of Louisiana, is not whether thereafter *the federal government* continued to recognize the bay, for as the Supreme Court has stated,

> it would be impermissible to allow the United States to prevent recognition of an historic title which may have already ripened because of past events but which is called into question for the first time in a domestic lawsuit. The latter we believe would approach an impermissible contraction of territory against which we cautioned in United States v. California. U.S. v. Louisiana, 394 U.S. 11, 78 n. 104.

For this obvious reason the Court in Alaska considered "suspect" post-oil litigation matters.[9] The only ques-

[9]United States District Judge James S. von der Heydt, in his findings of fact and conclusions of law dated the 29th day of January, 1973, in the suit of United States of America v. State of Alaska, Civil No. A-45-67, found:

"103. The so-called disclaimers relied upon by the United States government are ineffectual because (a) they are refuted by historic evidence, referred to above, which is clear beyond doubt; (b) they were hastily prepared, based on questionable research, and offered in a self-serving effort by the federal government to have the Court disregard historic facts; and (c) came at a time when historic title had already ripened into ownership of the disputed area of Cook Inlet.

104. The background investigation pertaining to the letter from Abram Chayes to Frank J. Barry dated May 3, 1962

tion after 1948 is, did any *foreign nation* protest or otherwise cease to recognize abundant assertions of

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was done by a staff assistant in the Office of the Secretary of State's Legal Advisor. The investigation was limited to records of the State Department. (Exhibit 58; Chayes' depos. pp. 5-12; Yingling's depos. pp. 5-12; 15-16; 18-21)

105. The background investigation pertaining to said letter was inadequate in that: (a) not all of the records of the State Department or other departments necessary to form an adequate basis for the conclusions contained in said letter were searched; (b) an adequate investigation would have required research by one person of at least three months, whereas in fact, the one person assigned to the project took only six days. (Simon's depos., p. 54-55; Exhibit HT; HT-1; Alaska's 11th Set of Interrogatories No. 4)

106. The conclusions contained in the letter from Leonard Meeker to Shiro Kashiwa, dated July 3, 1969, were based on on research other than that referred to above, plus an insignificant amount of additional research. (Carter's depos., pp. 6-11)

107. The charts depicted by Exhibit 73 were drafted by the Law of the Sea Baseline Committee at a time when this case was pending in this court. Among the members of that committee at the time was the principal attorney for the United States in this litigation. Said exhibit cannot be said to be an unbiased product. (Hodgson's depos., pp. 10-15; Exhibits HY, HX, IB, IC, IC-1)

108. The background factual research pertaining to Exhibit 73 was based upon no information other than that referred to in Findings 104-106. (Hodgson's depos., pp. 6-7; 44-45; 48-49)

109. Contrary to the position now advanced by the United States in lower Cook Inlet, the Baseline Committee determined Long Island Sound to be historic waters of the United States in the absence of a declaration by the Executive Branch to that effect. The Baseline Committee failed to discuss, in its deliberations, the possible historic status of Cook Inlet and it is clear such committee did not have before it the evidence which has been presented to this Court. (Hodgson's depos., pp. 49, 151-153; 157-159; Exhibit HX)."

jurisdiction theretofore made by both the United States and Louisiana and thereafter continuously and vigorously asserted by Louisiana? Even a foreign protest would be irrelevant if the title had ripened.

Almost contemporaneously with the filing of the lawsuit against Louisiana in 1948, even in 1946, official publications of the federal government were still representing to the world that East Bay measurements showed it to be inland waters, and the measurements are still officially used.[10]

There is an overwhelming preponderence of evidence showing the possession of East Bay as a body of inland water, which should be the subject of findings; *e.g.*, see Finding 5 treating facts such as the following: oyster leasing in 1903 and for many decades thereafter; patrolling by armed vessels which excluded foreign vessels from East Bay immediately after World War I, and during the 1920's; reinforced further by mineral leasing of the entirety of East Bay in 1928 with a great multiplicity of operations or contracts made during the 1930's and 1940's pertaining to East Bay; the subjecting of foreigners to the regulatory jurisdiction of Louisiana, through licensing Japanese fishermen and enforced compliance with Louisiana conservation laws; the exclusion of unlicensed out-of-state and foreign fishermen by Louisiana patrol vessels as far as the memory of witnesses extended (to 1918); the actual arrest of several foreign vessels in 1946 or

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[10] *Measurement of Geographic Area of the United States*, Plate VIII, La. Exh. 52 (1 § 2). See Findings G.I—O.

1947; the continued and renewed mineral leasing in the 1940's and 1950's by the State of Louisiana; and many other acts, state and federal.

By comparison, the *Alaska Cook Inlet* decision simply does not reflect a fraction of the facts supporting the historic bay claim for East Bay. The tentative subjective conclusion of the Master to the contrary simply will not stand close comparison of the factual details of the cases. For the Supreme Court's review, Louisiana is entitled to have reflected particular findings which would enable the Supreme Court to reach its own subjective comparative conclusions without need for remand. There were fishery statutes and regulations in Alaska affecting Cook Inlet. These were also present in East Bay. There was patrolling of Cook Inlet for a brief time. There was patrolling by armed vessels using a point-to-point headland system for measuring the three miles at East Bay at least since 1918. See depositions (La. Exhs. 145-149) which, since they were deposition evidence, could have been overlooked. There was a single, isolated arrest of a Japanese vessel in Shelikof Strait, many miles away from Cook Inlet in another waterbody Alaska claims on historic grounds. True, the arrest was partly on the claimed grounds that the vessel had earlier been in Cook Inlet, but this is not nearly as strong as East Bay evidence. There was not an arrest of a single vessel, but an arrest of a group of vessels within East Bay and at a point more than three miles from shore. In both East Bay and outside of Cook Inlet the arrests were by state enforcement officials concerned with fisheries conser-

vation law enforcement. In Alaska, Canadians had frequently entered the bay. This was done without any special license from the state of Alaska. Such innocent passage did not preclude historic inland bay classification. The only foreign entrances into East Bay other than perhaps emergency entrances in bad weather (which is not regarded as innocent passage) were under fishing licenses or registry obtained from the State of Louisiana which some Japanese who used to operate out of Barataria Bay and Grand Isle acquired to shrimp in inland waters during the 1930's. This was at least an implicit recognition of jurisdiction of the State of Louisiana and in compliance with the laws and authority of the state. Otherwise, foreigners were excluded by armed vessels, using a point-to-point system (the jetties and mudlumps).

There had not been 20 years of mineral leasing and mineral development activity in Cook Inlet prior to the first federal challenge to its status. The 1940 remeasurement for the geographic area of the United States reported in the official United States Department of Commerce publication in 1946, *Measurement of Geographic Area*, did not reflect any internal waters claim for Cook Inlet (Alaskan waters were not treated.) It did for East Bay, and plainly stated to be by application of the rules of the Geographer of the Department of State used to determine inland waters in international relations. There was no evidence in the Cook Inlet case that other resources of the bay had been the subject of exclusive leasing and scores of years of occupation and corporeal uses, *e.g.*, the oyster

and mineral leases in East Bay. There were no bird reservations affecting Cook Inlet. If Louisiana can have the specific particular fact findings to reflect the facts of what was present over the years by way of assertions of jurisdiction of the State of Louisiana and or the federal government in East Bay, we are confident that the Supreme Court, when it considers both cases, will do equal justice to Louisiana.

The Master's tentative draft suggests that assertions of jurisdiction, which may be made in territorial waters, are not probative of historic inland classification. This has been apparently based upon a misunderstanding of a certain facet of the Supreme Court opinion in the *Louisiana Boundary Decision* relating to rejection of the historic *waters* claim which used only the inland water lines designated under the Act of 1895. The importance of statements of the Court on this subject lies not in any erroneous implication that jurisdictional acts which may be done both in territorial and in inland waters are not probative of an historic inland *bay* claim; for no such legal rule was presented in the portion of the Court's opinion setting forth the relevant historic waters rules. The only agreed rules for historic bay determination given by the Court, for which it found substantial accord, were referred to in notes 102 and 107. See 394 U.S. 11, 23, n. 27; cross referenced at 75, note 102.

> These factors are: (1) The exercise of authority. . . (2) the continuity of this exercise. . . (3) the attitude of foreign states.

It is true, the Supreme Court indicated other considerations in notes 28 and 30, by way of obiter, in the context of dealing with Louisiana's historic *waters* claims stating with reference thereto "there is not complete accord." 394 U.S. 11, 24. We emphasize the word *waters* to show that the relevancy of the Court's remarks in notes 28 and 30, about matters for which there was a want of accord, was further lessened by the context. The context was not a discussion of historic *bay* claims, but of the broad historic *waters* claim based upon the old Inland Water Line position or Coast Guard Line argument that involved a line drawn dozens of miles at sea which was predominantly an historic *waters* contention, not a bay contention. Notes 28 and 30, 394 U.S. 11, 24, 30 both quoted *Juridical Regime of Historic Waters, Including Historic Bays*, U.N. Doc. A/CN.4/143 (1962). Note 28 reads:

> Historic title can be obtained over territorial as well as inland waters, depending on the kind of jurisdiction exercised over the area. "If the claimant State exercised sovereignty as over internal waters, the area claimed would be internal waters, and if the sovereignty exercised was sovereignty as over the territorial sea, the area would be territorial sea." Juridical Regime of Historic Waters, Including Historic Bays, *supra*, n. 27, at 23.

Note 30 reads:

> The recent United Nations study of the concept of historic waters concluded that "if the claimant State allowed the innocent passage of

> foreign ships through the waters claimed, it could not acquire an historic title to these waters as internal waters, only as territorial sea." Juridical Regime of Historic Waters, Including Historic Bays, *supra*, n. 27, at 23. Under that test, since the United States has not claimed the right to exclude foreign vessels from within the "Inland Water Line," that line could at most enclose historic territorial waters.

The material referred to as being at page 23 is found in the typed copy of the Juridical Regime document at page 66, U.S. Exh. 99, paragraph 164. Paragraph 163 had stated the general proposition that as to historic bays, the coast of which belong to a single state, the waters were internal waters and that the territorial waters commence outside that line.

> The dominant opinion as gathered from the statements assembled in the memorandum seems to be that historic bays, the coast of which belong to a single state, are internal waters.

Paragraph 165 at page 67 of the document, *Juridical Regime of Historic Waters, Including Historic Bays*, U.S. Exh. 99, made plain that the principles quoted in notes 28 and 30 of the Supreme Court's opinion, page 66 of U.S. Exh. 99, are reconciled with paragraph 165's statement by pointing out *that the territorial waters classification can only appertain* to *waters* and not to *bays*.

> In the latter case [referring to historic waters that are part of the territorial sea rather

> than inland in character] it would be preferable not to speak of an "historic bay" but of "historic waters" of some other kind.

Thus, when an indentation sufficient to be deemed a *bay* is the situs of the act, the act *coupled with the geography* shows the inland nature of the sovereignty asserted. It has been decided that the waters claimed by Louisiana in the Mississippi Delta on historic waters grounds, and this is especially true of East Bay, have a configuration sufficient to characterize them as historic bays.

> We do not pass on this contention except to note that, by the terms of the Convention, historic bays need not conform to the normal geographic tests and therefore need not be true bays. How unlike a true bay a body of water can be and still qualify as a historic bay we need not decide, for all of the areas of the Mississippi River Delta which Louisiana claims to be historic inland waters are indentations sufficiently resembling bays that they would clearly *qualify under Article 7 (6) if historic title can be proved. Louisiana Boundary Case*, 394 U.S. 11, 75, n. 100.

Thus, the Master is not empowered to consider whether the bodies claimed by Louisiana are merely historic *waters* and not historic bays, and notes 28 and 30 appertain, as the text of the opinion shows, only to those historic waters which are *not* bays. This argument is further supported by the clear letter of the text of the opinion. The Supreme Court, in treating Mississippi River Delta and East Bay claims, treated

them as historic bays and at 394 U.S. 11, 74, 75, used the term *bays* repeatedly in treating Louisiana's Mississippi Delta historic claims. However, by contrast, when discussing the so-called Coast Guard Line claims —a line 370 miles long which at most places did not enclose indentations or was not tied into headlands—the Court repeatedly used the term "historic *waters*." This related only to the rejection of historic claims based only on that line.

> Whether particular waters are inland has depended on historical as well as geographical factors. Certain shoreline configurations have been deemed to confine bodies of waters, such as bays, *which are necessarily inland.*[11] But it has also been recognized that *other areas* of water closely connected to the shore, although they do not meet any precise geographical test, may have achieved the status of inland waters. . . (emphasis added) 394 U.S. 11, 23.

It was not the historic bays, "which are necessarily inland," but the "other areas" of the Inland Water Line claim which were rejected as merely territorial by the Court. By contrast to the *bay* language used as to the Mississippi Delta claims, the term "historic in-

[11]Consider this statement in light of note 100 of the Court's opinion quoted *supra* concerning the sufficiency of the indentations to be bays in the Mississippi Delta, together with the Juridical Regime Document, the Court quoted, which stated immediately after the quoted paragraph as discussed *supra*, that it would be incorrect to speak of historic *bays* but rather the term historic waters should be used if the waters are merely territorial sea rather than inland waters.

land waters" was repeatedly used for the "other areas" of the historic waters claims. Pages 24, 25, 26, 27, 28, 29. The terms *waters* and *bay* were employed quite advisedly according to their context in the text of the Court's discussion.

Somehow the federal arguments have perverted the meaning of what was done in the document "Juridical Regime," changing a rule that permitting innocent passage shows a merely territorial intent into a false rule that only acts actually expelling foreigners physically are probative of an inland intent. The sole example quoted as evidence of the proposition that an assertion of jurisdiction would result in territorial sea classification, was the circumstances where such assertions were accompanied by the permission of innocent passage. (As in the Cook Inlet case, where even these facts did not deter an historic *bay* finding.) There is no occasion for innocent passage within an indentation of a bay-like geographic character, for innocent passage relates to routes which connect parts of the high seas, not entrances to inland waters nor inland waters themselves. Where innocent passage is practiced, navigational regulation alone is of course ambiguous and in the context of the inland water claim, was rejected by the Court as alone inadequate. For the particular concrete problem the court was discussing, one can readily understand how the court probably opined that a vessel 20 or more miles from shore, or clearly in the open seas where there was no trace of an indentation on charts, would not have a sense of being subjected to the inland jurisdiction of

a nation seeking to enforce navigational rules in shallow coastal waters.

To make an analogy to possession and prescription rules of the Civil Law, from which International Law on Historic Waters was derived, possession must be open and unequivocally as owner; that is, there must be acts suggestive of an intent to act as full owner. Navigational regulation *alone* under the circumstances described by the Court can well be understood as insufficient. However, exclusive acts have plainly evidenced a domestic imperium and dominium in East Bay: oyster leasing that started in 1903 and continued for scores of years, and mineral leasing that started in 1928, and the patrolling by armed vessels, and the arrest of foreigners in 1946; and the enactment of laws claiming the waters—these and other acts all are so overwhelmingly exclusive that there should be no doubt as to their efficacy for historic bay purposes, especially in an indentation which would give the plain geographic connotation of an inland bay claim.

> Whether particular waters are inland has depended on historical as well as geographical factors . . . configurations such as bays . . . *are necessarily inland.* 394 U.S. 11, 23.

The true impact of note 30 of the United States Supreme Court opinion, 394 U.S. 11, 26, pertaining to the effect of the allowance of innocent passage is that it is incumbent upon the party contesting the assertions of jurisdiction to show that innocent passage was normally or frequently allowed, that is, that the waters

which are the subject of the historic claim were an international route for traffic between parts of the high seas. Not only did the government fail to show such a thing, but the character of East Bay precludes such a showing. No vessel would go into East Bay for the purpose of getting to another part of the high seas but would only use it, navigationally, to enter or exit inland waters. The same is true of Caillou Bay and other waters claimed on historic bay grounds, none of which are useful for innocent passage to connect parts of the high seas. Shallowness or configuration makes international passage between parts of the high seas impossible. The real significance of the innocent passage quotation from the Juridical Regime document is this: jurisdictional acts which have been rejected as ineffective to prove an *inland* historic title were in the context of significant innocent passage, or the subject of an express limiting declaration. *United States v. State of California*, 381 U.S. 139, 171-173, discussion of the fact that the Santa Barbara channel served as an important route of international passage which precluded it from being classed as inland water; discussion of Coast Guard Line in *United States v. Louisiana*, 394 U.S. 11, 27 (1969); and U.S. Exh. 99, p. 66.

If the Master adheres to his tentative ruling that Louisiana's evidence has a merely territorial significance, that ruling will be inconsistent with many authorities which, on the basis of lesser evidence than the undisputed evidence presented by Louisiana, have recognized historic bays to enclose inland waters.

Thus, the authorities recognize that there was no

question that when Delaware Bay and Chesapeake Bay were adjudicated to be historic bays, their waters became inland waters of the United States. (Op. A.G. 32 (1852)). (*Stetson v. U. S.*, No. 3993 Class 1) (2d Court of Commissioners of Alabama Claims). This is likewise true of Long Island Sound. At first Long Island was not recognized by the United States State Department as a historic bay, but this was corrected by Mr. Leonard C. Meeker, Legal Advisor for the State Department, in his letter to Mr. Erwin N. Griswold, Solicitor General, dated April 8, 1969. When Long Island Sound was recognized as a historic bay, no question was raised about its waters being inland waters of the United States. See U. S. Exh. 108.

The Convention on the Territorial Sea and the Contiguous Zone itself refutes the United States' contention that East Bay and Caillou Bay are territorial seas but not inland waters. The rules of Article 7, it will be noted, are prescribed solely for the purpose of defining the baseline for the measurement of territorial sea across the mouths of or within bays, and that waters inside that line are inland waters. Accordingly, the only sensible meaning of Section 6 of that Article (the exception of historic bays) is that a baseline drawn across the bay's entrance encloses inland water.[12]

[12]Paragraph 116, Historic Bays, indicates that a bay can contain historic waters only if the recognized historic bay were equal to the width of the historic water in the bay. Thus, since one-half of the distance between the headlands of East Bay and Caillou Bay is more than three miles in each case,

Thus in the document, Historic Bays, Memorandum of the Secretariat of the United Nations, Document A/Conf 131, one of the United States' own exhibits in the case (Exh. 97), we find:

> "It is always necessary to remember, in dealing with 'historic waters,' the essential point that those waters are internal waters. This fact explains many aspects which would be otherwise difficult to grasp. The theory was originally evolved to apply to 'bays,' and is still referred to as the theory of 'historic bays,' because it was never envisaged that it might apply except in areas which, by reason of their configuration, are generally not used as major international routes of transit; . . ." Historic Bays 117. (See also Juridical Regime 163 wherein it is stated that the dominant opinion is that historic bays are internal waters.)

The United States does not dispute authority of a state exercising sovereignty (Juridical Regime, 80) over bays in order to claim them as historic waters. What kind of acts constitute "sovereignty"? The United States contends that the requisite exercise of sovereignty must consist of acts directed against foreigners. The only evidence in the record on this subject is that introduced by Louisiana, which establishes that Louisiana's enforcement policies in East Bay and Caillou Bay were directed both against nationals and foreign-

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it necessarily follows that the territorial sea of the United States must have been more than three miles. This, of course, is not true since the United States was only claiming a territorial sea of three miles.

ers alike. The United States did not offer one scintilla of evidence to establish that foreigners used East Bay or Caillou Bay without complying with the laws, rules and regulations promulgated by Louisiana for fishing in these waters. Certainly if there was such evidence the United States, with its vast resources would have produced it.

Recognizing that sovereignty must be effectively exercized by deeds and not merely by proclamations, the writers of the Juridical Regime stated:

> "This does not, however, imply that the State necessarily must have undertaken concrete action to enforce its relevant laws and regulations within or with respect to the area claimed. It is not impossible that these laws and regulations were respected without the State having to resort to particular acts of enforcement. It is, however, essential that, to the extent that action on the part of the State and its organs was necessary to maintain authority over the area, such action was undertaken." Juridical Regime 99.

The absence of foreign vessels (except a few who recognized Louisiana's sovereignty by the purchase of licenses from Louisiana) and Louisiana's policy of enforcing its laws and rules in the waters of East Bay and Caillou Bay against nationals and foreigners alike satisfy this pronouncement. In discussing the kind of authoritative acts the State must exercise, the author of the Juridical Regime document stated:

"Suppose . . . that the State has continuously as-

> serted that its citizens had the exclusive right to fish in the area, and had, in accordance with this assertion, kept foreign fishermen away from the area or taken action against them. In that case the State in fact exercised sovereignty over the area, and its claim, on a historical basis, that it had the right to continue to do so would be a claim to the area as its 'historic waters'. The authority exercised by the State would be commensurate to the claim and would form a valid basis for the claim (without requirements for the title must also be fulfilled)." Juridical Regime 86.[13]

The author went on to quote the opinions of prominent and internationally recognized writers on the subject and to refer to international conventions and arbitrations. One writer, Gidel, in discussing the acts by which authority is exercised, stated:

> "It is hard to specify categorically what kind of acts of appropriation constitute sufficient evidence: the exclusion from these areas of foreign vessels or their subjection to rules imposed by the coastal State which exceed the normal scope of regulations made in the interests of navigation would obviously be acts affording convincing evidence of the State's intent. It would, however, be too strict to insist that only such acts constitute evidence. In the Grisbadarna dispute between Sweden and Norway, the judgment of 23 October, 1909 mentions that 'Sweden has performed vari-

[13]See Deposition of Captain Schouest on the armed patrols commencing in 1919, and how the Japanese and other foreigners honored them. Finding 5.P. See also depositions of other law enforcement officers. Findings under 5.

ous acts. . . owing to her conviction that these regions were Swedish, as, for instance, the placing of beacons, the measurement of the sea, and the installation of a light-boat, being acts which involved considerable expense and in doing which she not only thought that she was exercising her right but even more that she was performing her duty.' " Juridical Regime 89.

Bourquin, another writer, agreed and stated:

"What acts under municipal law can be cited as expressing its desire to act as the sovereign? That is a matter very difficult, if not impossible, to determine *a priori*. There are some acts which are manifestly not open to any misunderstanding in this regard. The State which forbids foreign ships to penetrate the bay or to fish therein indisputably demonstrates by such action its desire to act as the sovereign." Juridical Regime 90.

In the *Fisheries* case, *United Kingdom v. Norway*, Judgment of 18 December, 1951, Norway stated in its Counter-Memorial:

"It cannot seriously be questioned that, in the application of the theory of historic waters, acts under minicipal [sic] law on the part of the coastal State are of the essence. Such acts are implicit in an historic title. It is the exercise of sovereignty that lies at the basis of the title. It is the peaceful and continuous exercise thereof over a prolonged period that assumes an international significance and becomes one of the elements of the international juridical order.' Juridical Regime 93.

Clearly Louisiana's evidence meets the test set forth in the above-quoted portion of the Juridical Regime, an authority admitted by the United States to be controlling in this case. The United States Supreme Court has decided that state acts may be considered in establishing jurisdiction over inland waters.

Another misunderstanding in the Master's draft concerning the Supreme Court's 1969 opinion warrants correction. The Court, 394 U.S. 11, 27, quoted administrative acts commencing in 1948 and in 1953, 1964, and 1967 (each happening at or immediately before an active phase of the controversy) disclaiming importance for the 1953 Coast Guard Line. Disclaimers in or after 1948 are suspect. The 1943 Coast Guard Manual did not clearly disclaim jurisdictional importance but merely stated that the line quite obviously did not truly separate the high seas from the inland waters. Obviously, it could not, because territorial waters intervened. But if the latter point were not true, still between 1895 and during all the many subsequent declarations of lines around the Mississippi Delta prior to 1953, jurisdiction, at least navigational, was declared and exercised under the Act of 1895. Alone, perhaps this might not be enough. However, given the many acts and lines depicted in La. Exh. 285, the cumulative effect is enough. In effect, before Article 4 was articulated, the United States itself drew or recognized straight baselines, thus, adding to the historic bay body of evidence. There had, "in effect" been a drawing of an international baseline by subsequently

defined principles and methods. That is enough. See 394 U.S. 11, 74.

CAILLOU BAY

If Caillou Bay had been long treated as inland waters, it would be historic inland waters if not an historic bay. The Court said:

> ". . . other areas of water closely connected to the shore, although they do not meet any precise geographical test, may have achieved the status of inland waters by the manner in which they have been *treated by the coastal nation*. . . .
>
> [H]istoric title can be claimed only when the 'coastal nation has *traditionally asserted and maintained dominion* with the acquiescence of foreign nations.' " 394 U. S. 11, 23.
>
> "It would be [impermissible] to allow the United States to prevent recognition of a historic title which may already have ripened because of past events but which is called into question for the first time in a domestic lawsuit. The latter, we believe, would approach an impermissible contraction of territory against which we cautioned in *United States v. California*. See n. 97, *supra*." 394 U. S. 11, 77 n. 104.

Moreover the United States has in effect utilized straight baselines around Caillou Bay and would change now in an impermissible effort to prevail in this litigation.

> "If that [that the United States had taken

> a posture of a firm and continuing international policy to enclose inland waters within island fringes to the extent that it could be said to have in effect utilized the straight baseline approach] had been the consistent official international stance of the Government, it arguably could not abandon that stance solely to gain advantage in a lawsuit to the detriment of Louisiana." 394 U.S. 11, 74 n. 97.

The Special Master should first determine when the United States called into question Louisiana's inland water claim to Caillou Bay in a domestic lawsuit. Caillou Bay has been treated by Louisiana as a bay since its admission into the Union in 1812. Caillou Bay has been designated as a bay on maps since that date. When Act 52 of 1904 and similar prior acts were passed, by which Louisiana claimed title to the beds and bottoms of all bays on the Gulf, Caillou Bay was such a bay and title was vested in the State of Louisiana. After the decree of December 11, 1950, by which the United States Supreme Court determined that Louisiana had no marginal sea, the Honorable Philip B. Perlman, on March 16, 1951, made demand on Louisiana to account for offshore oil and gas operations gulfward from a line on Charts 1115 and 116. Caillou Bay was treated on the charts as inland waters. This is the same set of maps on which the United States disputed Louisiana's claim to East Bay. When the Submerged Lands Act was passed in 1953, Caillou Bay was inland waters of Louisiana and was so recognized by the United States.

This was true throughout the litigation interpreting initially Louisiana's claim under the Submerged Lands Act, which resulted in the decree of the Supreme Court, dated May 31, 1960,[11] determining that Louisiana had no historical boundary and was only entitled to three miles from its coastline. The arguments leading to that decree had recognized the inland character of Caillou Bay and all other waters enclosed by islands.

In 1961, even after the 1958 Territorial Sea Convention, the United States was still adhering to the Chapman Line position on Caillou Bay, on the basis of State Department direction. See La. Exh. 178, and Finding 14.T.

In the *California* litigation, no indication was given of any change in the United States position on the island-bay closing lines and the recognition of the sufficiency of enclosure, but rather the Louisiana facts of sufficiency of enclosure were merely distinguished from Santa Barbara Channel. (After 1968 the Santa Barbard Channel holding has been urged as dispositive of Caillou Bay issues.) For the first time in 1968 the Proposed Supplemental Decree No. 2 and Memorandum in Support of the Motion for the United States and in Opposition to the Motion of the State of Louisiana called Louisiana's title to Caillou Bay in question in the following language.

> "Under the Convention on the Territorial Sea and the Contiguous Zone, waters between the mainland and coastal islands do not have the status of

[11]United States v. State of Louisiana, 363 U.S. 1.

inland waters unless the coastal nation elects to enclose them by straight baselines under Article 4. *Prior to that Convention there was no international consensus on the subject; but the United States had taken the position that such waters were inland waters at least in some circumstances.* In accordance with that position, we have heretofore treated Chandeleur and Breton Sounds as inland waters in this case and its predecessor, United States v. Louisiana, No. 13, Original, October Term, 1948; No. 12, Original, October Terms, 1949-1950; No. 7, Original, October Terms, 1951-1960." (Page 78). (Emphasis added)

The United States continued on page 79 to state:

"On the same basis we conceded in 1948 that the waters *between the mainland and islands belonging to Louisiana under its Act of Admission were in fact sufficiently enclosed to constitute inland waters under the principles then being followed by the United States.*" (Emphasis added.)

The United States went on to say:

"We think that there would be much justification for asking at this time to be relieved of a concession, at variance with the Convention on the Territorial Sea and the Contiguous Zone, made four months before that Convention was signed by the United States, more than six years before it entered into force, and seven years before this Court announced that the grant made by the Submerged Lands Act of May 22, 1953, was to be measured by the rules of the Convention *rather than by the principles followed by the United*

States at the time the Act was passed." Id. at 79-80.[15]

It was no concession, as argued by the United States. It was a statement of a firm policy by the United States. To understand why it was not a concession, it is necessary to consider correspondence that has been received from the United States bearing on this subject. In the letter dated February 29, 1960, from Honorable J. Lee Rankin, Solicitor General of the United States, to Rear Admirable H. Arnold Karo, Director, Coast and Geodetic Survey, Department of Commerce, Washington 25, D.C., with a copy to Raymond T. Yingling, Assistant Legal Adviser, Department of State, and to Dr. G. Etzel Pearcy, Geographer, Department of State, Mr. Rankin stated:

> "On July 6, 1950, in response to a specific inquiry in connection with the case of United States v. Louisiana, 339 U.S. 699, the State Department advised us that Chandeleur Sound should be considered inland water. On *October 26, 1950, in the same connection, Dr. Boggs, then Geographer of the State Department, joined with representatives*

[15]It will be seen from the above the United States, in dealing with foreign countries, recognized water enclosed by a string of islands as inland waters and it was only after the ratification of the Convention on the Territorial Sea and the Contiguous Zone that the United States changed its position. The Convention on the Territorial Sea and the Contiguous Zone was ratified on March 24, 1961, by the United States as T. I. A. S. No. 5634 and on September 10, 1964, when the requisite number of nations had ratified it the Convention went into force.

of the Department of the Interior and this Department in describing, on that basis, a line, (commonly referred to as the 'Chapman Line') to represent the official position of the United States as to the coast line of Louisiana, that is, the base line for the three-mile belt. We followed this position in our brief in support of our motion for judgment on the amended complaint in the related case of United States v. Louisiana, et al, No. 11, Original, October Term, 1957, at page 177; a draft of that brief was submitted to the State Department in May, 1958, before it was filed, and no question was raised on this point. The position was repeated at pages 43-44 of our reply brief in the same case, a draft of which was likewise submitted to the State Department in August 1958. At that time, Mr. Yingling, Assistant Legal Adviser, did raise a question regarding Chandeleur Sound; but at a conference between him, Dr. Pearcy, and John F. Davis and George S. Swarth of this Department, it was agreed that we should continue to concede that the Sound is inland water. Because of this concession, it was unnecessary for Louisiana to press certain aspects of its argument as it might otherwise have wished to do." [16]

The Court, in this case, held:

"It might be argued that the United States' concession reflected its firm and continuing international policy to enclose inland waters within island fringes. It is not contended at this time, however, that the United States has taken that posture in its international relations to such an

[16] Included in La. Exh. 283 (20). (Emphasis added.)

extent that it could be said to have, in effect, utilized the straight baseline approach sanctioned by Article 4 of the Convention. If that had been the consistent official international stance of the Government, it arguably could not abandon that stance solely to gain advantage in a lawsuit to the detriment of Louisiana.[17] Cf. United States v. California, 381 U.S. 139, 168: '(A) contraction of a State's recognized territory imposed by the Federal Government in the name of foreign policy would be highly questionable.' We do not intend to preclude Louisiana from arguing before the Special Master that, until this stage of the lawsuit, the United States had actually drawn its international boundaries in accordance with the principles and methods embodied in Article 4 of the Convention on the Territorial Sea and the Contiguous Zone." 394

It is clear that the United States recognized, prior to the adoption of the Convention on the Territorial Sea and the Contiguous Zone, that Caillou Bay was inland waters under the rules then recognized by the United States in its relation with foreign nations.[18] This is another instance where the United States, after the adoption of the Convention on the Territorial Sea and the Contiguous Zone, is attempting

[17]It is noted that the Supreme Court did not have the above document or other related materials contained in Appendix A and La. Exh. 178 before it at the time of its 1969 opinion.

[18]There is attached hereto Appendix A, a Chronological listing of Documents Relating to the United States and International Law on Islands and Groups of Islands Enclosing Inland Waters.

to deprive Louisiana of title which was validly vested in Louisiana prior to the adoption of such Convention.

If the Special Master fails to recognize Caillou Bay as historic inland waters, it will be necessary for the Special Master to decide whether the United States by its ratification of the Convention on the Territorial Sea and the Contiguous Zone divested Louisiana of title to Caillou Bay which had ripened in Louisiana prior to the United States' adoption of such Convention.

The United States, in its suggested findings of fact and conclusions of law submitted to the Special Master by letter dated December 3, 1973, argues "At all events, regulation of fishing up to 12 miles from shore (which would more than encompass all of East Bay) could as well be viewed as the assertion of a territorial sea of that width." (Page 17 (d)), and then stated: Thus, any acquiescence by foreign fishermen in Louisiana's shrimping and fishing regulations as applied to the most seaward portions of East Bay would prove no more than that they were willing to treat the area as part of the American territorial sea—not inland waters of the United States." Page 17 (f). This not only ignores the recency of the 12 mile fishing zone position of the United States in foreign relations and its former rigid position on the three mile rule, it also implies that the United States recognized that Louisiana did enforce its fishing and shrimping regulations in the total of East Bay against foreigners as well as nationals, but argues that such would not establish the waters of

East Bay as inland waters. This was the same argument made by the United States in the Alaskan case and was rejected both by the lower court and the United States Circuit Court for the Ninth Circuit. In his report, the Special Master seems to accept the argument of the United States that all of the acts performed by Louisiana in East Bay were consistent with the character of those waters as territorial sea, and thus errs.

The United States, in effect, drew straight baselines around Caillou Bay.[19] In our briefs we discussed proof of the firm and continuing policy of the United States in its international relations to treat island fringes as enclosing inland waters. This policy was given specificity by use of a ten-mile standard and even applied in this very litigation for twenty years until the 1968 motion. See Appendix A. We there present the history of this policy: *in esse*, starting in the 1860's with the recognition of Spanish claims in Cuba; thereafter with the recognition of British Bahama claims; in the recognition of Cuban island claims in 1955; in the work of Boggs for the 1930 Hague Conference; the application of Boggs work in the re-measurement of the United States in 1940; the 1946 publication of that standard in the Department of Commerce work *Measurement of Geographic*

[19]This is true also at East Bay and generally in the Mississippi Delta, but is especially pertinent to East Bay; therefore, for convenience in presentation, the treatment of the question is given under Caillou Bay but reference is made to Mississippi Delta straight lines also.

Area of the United States (Louisiana exhibit 52(1)); the drawing of the Chapman line in collaboration with the State Department; in the position publicly recognized and urged in this litigation from 1948 until 1968; in the Coast and Geodetic Survey publication, *Shore and Sea Boundaries;* in the 1951 letter from the Secretary; in the interdepartmental work of 1961; and in other actions treated in Appendix A. These facts and others certainly show a firm and continuing policy to enclose as inland those waters within island fringes. This is all the Court suggested was necessary to arguably show that the United States had in effect drawn straight baselines. However, Louisiana presented much stronger evidence.

We showed the publication of the Chapman line actually enclosed Caillou Bay as inland waters. (There can be no stronger proof than this that the Bay was recognized as inland waters until after the litigation started.) We showed, additionally, that the Bureau of the Census had drawn baselines around Caillou Bay in the 1940 Census measurement of United States territory. Additionally, all affected federal agencies concurred in the closing line for Caillou Bay in 1961. Similarly, there was unchallenged proof that lines were drawn around East Bay and the entire Mississippi Delta by federal agencies, including lines related to bird reservations, game refuges, navigational regulatory lines, and the 1940 *Measurement of Geographical Area* lines (Louisiana exhibit 52(1)). This is but to name a few.

It is a clearly impermissible contraction of terri-

tory to now deny inland status of a bay which, even during twenty years of oil litigation claims had been recognized to be a bay since 1812 and which no foreign nation had ever claimed to be high seas. There is clearly then a need for the Master to pass upon the issue of whether the State of Louisiana may be divested of recognized territory in the name of foreign relations. See Appendix A and historic Caillou Bay findings requested in the attached motion.

General and Concluding Comments on Historic Bays

We have recounted here much material relative to East Bay and Caillou Bay both because of its importance and because it is equally applicable in other major areas of the Mississippi Delta claimed on historic bay grounds. Thus, for example, the long history of point-to-point law enforcement including patrols by armed vessels excluding out-of-staters and foreigners in East Bay as per the deposition of Captain Schouest, Captain Von Lubbe and other Louisiana law enforcement commanders of armed vessels, applied as well throughout the whole Mississippi Delta as did the mineral leasing, fisheries regulations, statutory claims and other acts, all of which also affected Caillou Bay and for which repetitive discussion is unnecessary. There are certain powerful statements, though, which appertain to all of the waters claimed on historic bay grounds which this selective discussion of particular problems in the Master's report may not have highlighted.

It is undisputed that prior to the determination

of the United States to litigate with California no government but Louisiana laid claim to the waters now in litigation.

It is undisputed that even after the United States determined to litigate with California, no nation in the entire world has disputed Louisiana's claim to these waters but the United States.

It is undisputed that as part of the federal constitution the states assigned a part of their sovereign rights—dealing with other nations—to the federal government, and the latter is not authorized to use this power to the detriment of the states and the enrichment of the federal treasury.

It is undisputed that the purpose of this domestic litigation is a division of the submerged mineral resources between the state and federal government but that by action to which Louisiana was not a party, the Federal Government seeks to prevail by giving away American territory that no foreign government seeks to get.

It is undisputed that the reference in the Convention on the Territorial Sea and Contiguous Zone made long after the Submerged Lands Act to historic waters would justify the United States in successfully maintaining that character of these waters through the activities of Louisiana against any possible foreign claimant.

It is undisputed that before this litigation between the federal and state governments, the internal

status of these waters as part of the United States and part of the territory of Louisiana was never challenged by any nation. Not until the California case, decided by a divided court in 1947, was there any concept of a federal belt around the seaward states.

It is undisputed that the Constitution of the United States forbids depriving a state of its territory without its consent.

In all issues between a littoral nation and another as to the extent of internal waters, the littoral nation is entitled to protect its economy and safety by choosing the most seaward and not the most inland points to serve in marking its boundary so long as there is geographic or historic support for such point.

In the resolution of this conflict, where reasonable choices exist, that one should be made which best preserves American territory.

If unchallenged oyster leases dating back 70 years are not enough to show waters were recognized as inland waters of the state; if mineral leasing both in Caillou Bay and East Bay and all of the Mississippi Delta bays dating back 20 years before this oil claim was first made is not enough; if official recognition of the status of Caillou Bay as inland waters between 1948 and 1968 in this oil litigation is not enough; if 79 years of navigational control over East Bay is not enough; if straight baselines drawn by the Bureau of the Census around East Bay and other bays of the Mississippi Delta and Caillou Bay are

not enough; if bird reservations encompassing East Bay on maps are not enough; if official designations by the Secretary of the Interior to reflect Department of State policy in this litigation are not enough, as at Caillou Bay with the Chapman Line; if 100-plus years of continuous uninterrupted policy on island fringes for Caillou Bay is not enough; if the arrest of foreigners is not enough if scores of years of armed patrols enforcing fishing regulations is not enough; if a point-to-point system of juridical ascertainment and law enforcement in the Mississippi Delta and at Caillou Bay is not enough; if at least 144 years of satisfaction of precise geographic standards at East Bay is not enough—*if all of this together* is not enough to show a title by historic or straight baseline considerations, then the Master will have decided that the language of the Supreme Court is in fact illusory and meaningless, for he will have held in essence that the historic waters and historic bay rules and straight baseline considerations suggested by the Court were hollow hopes and that only present geographic or geomorphic facts are functionally relevant.

We turn to those geomorphic matters now on a highly selective basis to avoid rebriefing. Here and in our discussion of historic straight baseline matters, omission of positions previously reached is not to be construed as an indication of waiver of these positions but is occasioned by the selective nature of this memorandum. See proposed findings for more fully detailed findings requested of the Master on geomorphic matters under the Convention.

JURIDICAL AND GEOGRAPHIC MATTERS[20]

East Bay Juridical Status

The Master has tentatively decided against the use of tributary waters for area measurement distinguishing the only precedent, the *Thames Estuary* decision, on the ground that East Bay is not an estuary. The rules that were applied in the Thames Estuary were based not per se on its status as an estuary, but on the fact that estuaries are treated as bays. See 1 *Shalowitz* 217. Thus, the Master has presented *a fortiori* reasoning to follow the decision, as grounds for distinguishing it. The case is indistinguishable. It will weaken the report, unless the report follows the case, instead of seeking distinctions.

If the precedent is followed only to the extent of employing those waters which are directly tributary to the bay, the *Thames* decision could not reasonably be used to attack the Master's report in the Supreme Court. If it is not followed, and the present draft employed, the Master's rejection of the use of tributary waters will be subject to attack through a host of arguments, *e.g.*:

1. The draft is inconsistent with the Supreme Court's semicircle test usage of geographically distinct waterbodies within waterbodies, separated only by streams and stream bank islands. 394 U.S. 11, n. 65,

[20]It will assist the Master in examining these arguments to review the findings requested for each area, and to use the syllabus of the requested findings, attached hereto as Appendix B.

see illustration La. Reply Brief, p. 58 and Fig. 58A in re Zinzin Bay and Riverside Bay.

2. In deeming "arbitrary" a system which would terminate tributary water measurement at the point where the tributary nature of the waterbody ceases, the draft errs.

3. Even if the method of terminating measurements of tributaries where they join the Mississippi proper was "equally arbitrary," as cutting them off at their mouths, the decision to cut them off at their mouths would violate a court applied principle calling for selection of the method enclosing the greater extent of waters. See Finding 28.

4. The Master solves the problem of deciding how far up tributaries to go by not going up into them at all, thus making a choice that would tend to defeat the semicircle test in a marginal case. This is error. See Finding 28.

5. Like bays, ponds or coves linked only by narrow passages or channels to an outer indentation, narrow passages or channels are tributary waterways themselves and should be included under the Court approved rule. 394 U.S. 11, 51, n. 66.

> " 'In the application of the semicircular rule to an indentation containing pockets, coves or tributary waterways, the area of the whole indentation (including pockets, coves, etc.) is compared with the area of a semi-circle.' " Quoting 1 *Shalowitz* 219.

6. The Court said follow the Convention; the Convention says follow the low water mark.

The reference to the Master commands that his report be "consistent with this opinion." 394 U.S. 11, 78. As a bare minimum, even partial consistency would require acceptance of Method 2 and use of passages and channels. Complete consistency would also call for use of islands within the bay. Method 3, and use of the deteriorated island remnants of the Joseph Bayou area as water are also required by the opinion.

We respectfully point to the Special Master's error in saying that Louisiana had endeavored to include evidence of the deterioration of the Joseph Bayou area (relative to the semicircle test) only in a brief after the record had been closed. Photography of the Joseph Bayou area was included in a post-argument technical memorandum requested by the Master merely to illustrate that the facts of Joseph Bayou deterioration discussed by witnesses and shown by a mass of photographs in the record were continuing even at present. The Master's report reads as though the only evidence of Joseph Bayou land mass deterioration was evidence after the closing of the record. This is clearly erroneous. See materials treated in findings hereafter requested and especially testimony of Allan Ensminger, the surface photograph panorama introduced with the testimony of Dr. Morgan, La. Exh. 342, and low oblique aerial photography in the record, *e.g.*, La. Exh. 9. These simple, eloquent pictures will cause the Supreme Court to feel as qualified to pass upon this

question as anyone else looking at the photographs. They must have been understandably overlooked in examining the extensive record. We are confident that upon a review of this record material and other record evidence which has been overlooked, the Master will correct his report by changing his conclusions to fit the *record* evidence. Or, if the Master deems the *record* evidence immaterial, then he should deny the request for a finding on that ground to form an appealable basis for Louisiana to seek review as to the materiality of the photographs, and the Morgan-Ensminger testimony.

If the Master now recognizes that the deterioration of Joseph Bayou landforms was shown by record evidence, but adheres to the approach rejecting use of tributary waters, Closing Line B should be recognized. It failed to meet the semicircle test using Method 1 by a mere 820 acres out of 14,714 acres. The Joseph Bayou island remnant areas (so much like the deteriorating fragments of land in West Bay recognized by the Court as water for measurement) obviously affect materially more than 820 acres. See La. Exh. 197 and requested findings.

By Method 2, using tributary waters, the data would justify Line B, even if Joseph Bayou deterioration were not recognized.

By Method 3, Line A even presently satisfies the semicircle test. This conclusion is fortified by inclusion of Joseph Bayou land remnants as islands.

Even using conservative Method 1 and ignoring

evidence of the deterioration of Joseph Bayou, Line A satisfies all relevant tests until 1956. Not until that year did it cease to satisfy the semicircle test. See arguments *supra*, under historic waters, detailing the fact that *by the conservative method approved by the Master*, and by application of the Convention retroactively, as the Court did in the *California* case, Line A enclosed a bay on June 5, 1950 until 1956.

Issue 6(e) requires answer to the question:

> "Have there been changes in the coastline that would affect future distribution of revenues heretofore accrued since June 5, 1950, and, if so, when did the changes become effective?"

Precise answer has not been given to this question. Only by accepting Method 3 and Line A, or by finding that East Bay is an historic bay, can the status of geomorphic alternatives over time be ignored. Serious oversight may otherwise occur, such as the oversight in failing to give effect to Line B'.

The federal government repeatedly admitted Line B' met the semicircle test by the conservative method the Master approved. It plainly satisfies headland and other bay considerations. Yet the draft report ignored it. Federal suggestions to reject it on other grounds simply won't hold water, as our oral discussion shall show.

On Cowhorn Island, the Master is eminently correct, except that he does not carry the finding forward in time as the evidence warrants. Removal from

the December 6, 1969 chart was based on a lawyer's instructions, and contrary to normal hydrographic standards used under unsuspicious circumstances. It quite obviously resulted from a hurried effort to overcome the effect of depositions which had shown there was a survey basis—a hydrographic survey basis—to placement of the island on the chart. This caused the government to realize Louisiana would rely on the chart and so the chart was changed, with no new evidence to justify the change, no evidence beyond that which had previously been considered and rejected at an unsuspicious time. The survey, later made to justify a further revision, was made *immediately after a hurricane*, and was worthless to reflect normal shoreline conditions, as the federal survey party chief admitted.

That survey was also remarkably deficient in other respects, *e.g.*, taking soundings *seaward* of an area to show that the area was below the low water line. See La. Reply Brief, p. 149, Fig. 149A, which shows the quality of that proof. Thus, even if the Master concludes that Cowhorn Island no longer existed after December 6, 1969 because of the 1970 survey, the same cannot be said for the additional low water lines between West Bay and Pass Tante Phine, at the mouth of Pass du Bois. When the Joint Pretrial Statement was filed in Memphis on December *5*, 1969, the alleged December *6* revision of the chart was not yet made. Obviously, Issues 8(a) through (e), indeed all of the issues related to the effect of Chart 1272, are based on the editions extant on or before Decem-

ber 5, 1969. Hurried or post-hurricane changes in the chart thereafter, so obviously timed at a suspicious date, under the admitted direction of counsel, and plainly for purposes of this litigation, should be ignored, not merely because of their unreliable character, but because the Statement of Issues does not appertain to them.

Louisiana expressly objected to introduction of the post-December 5, 1969 revisions of Chart 1272. We accordingly request a finding that the parties agreed in Memphis in a meeting before the Master on December 5, 1969 to issues pertaining to Chart 1272, and this agreement therefore did not reasonably relate to editions revised after December 5, 1969. We further request a finding that post-December 5, 1969 revisions of Chart 1272 be rejected as intrinsically unreliable, due to the suspicious timing of the chart revisions, their plain purpose to affect this litigation, and the absence of reliable survey evidence to show normal shoreline conditions to support the revisions.

Caillou Bay

Islands which have been treated realistically as part of the mainland and as forming the side of Florida Bay in the report of the Florida Master, presents less favorable assimilation data than the facts of the Isle Derniere. It is inconceivable that in the context of no final judgment, the Supreme Court of the United States will allow a passing error in a footnote concerning a misunderstanding of what had been argued to control a Louisiana Special Master's report

and compel ignoral of the geomorphological facts at Caillou Bay that are markedly more favorable to bay classification than those of Florida Bay and the Keys. See requested findings and related illustrations comparing the data. Even if the Master feels bound by the passing footnote remark, to avoid possible remand, the report should reflect factual findings to enable the comparative data to be reviewed by the Supreme Court; or there should be a finding that the requested findings are irrelevant or immaterial under the Court's opinion in order to furnish a basis of review. Of course, Louisiana maintains, as with all of the requested findings it has proposed, that all are material and relevant, but the purpose in submitting them is to perfect the record to enable Louisiana to argue that particular requested findings should have been granted if they in fact have not been granted.

Similarly, the great array of data showing that Isle Derniere segments are to reasonably be considered as part of the mainland ought to be the subject of findings. These and other detailed findings are requested for Caillou Bay.

Other Major Matters

The *Florida* decision and island assimilation problems affect numerous bay headlands along Louisiana's coast. We have therefore prepared findings which are substantially self briefing to augment or correct the Master's report on several island matters.

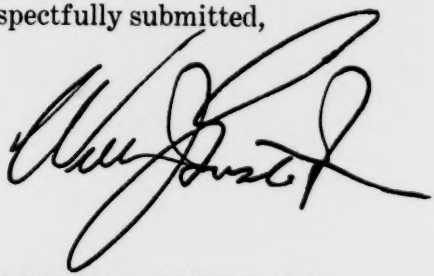
Other miscellaneous details are important also,

but are not amplified in this memorandum although treated in the findings. This is of course for the purpose of brevity and is not to be construed as an indication of the relative importance of the matter.

Certain corrections and reconsideration of Atchafalaya Bay problems are requested in a finding.

The Master's decision at Ascension Bay is correct, but can be reinforced by certain specific additional findings which are requested. Similarly, East Bay geomorphic findings of the Master which were favorable to Louisiana can be reinforced by requested findings.

Respectfully submitted,



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May 13, 1974

APPENDIX A

A Chronological Listing of Documents Relating to United States and International Law on Islands and Groups of Islands Enclosing Inland Waters

Page

I) Insular Features Enclosing Inland Waters (United States Practice) 63, 64, 75, 85, 88, 93-109, 112-126

II) Codification Attempts for Groups of Islands....69-74, 78-88, 11

III) Straits Leading to Inland Waters 69-74, 77, 105-108, 112, 121, 122

IV) Assimilation of Islands to Form a Bay's Perimeter 65-68, 89-91, 103-105, 109-110, 126

Index

Page

1863: Letter from U.S. Secretary of State Seward to Spanish Minister Gabriel Tassara 63

Portion of Map of Cuba from Rand-McNally, *THE International Atlas* (1969), p. 230 64

1891: United States Supreme Court in *Manchester v. Massachusetts*, 139 U.S. 240, 243 65

Map of Buzzard's Bay from Strohl, *International Law of Bays* at p. 177 66

1910: *The North Atlantic Coast Fisheries Arbitration* 67

Portion of Yarmouth-Windsor Map (Nova Scotia) Showing Brier and Long Islands 68

Portion of Yarmouth-Windsor Map (Nova Scotia) Showing Closing Line for Mira Bay, which Uses Scatari Island as a Headland 68

1930: Hague Conference—International and United States Proposals Treating Island Groups and Straits Leading to Inland Waters 69

1930: S. W. Boggs's Explanation of the United States Proposal at the Hague Conference 74

1940: Census Bureau Delimitation of Internal Waters 75

1951: Letter from the United States State Department to the Justice Department Explaining National Position on International Law of the Sea 77

1952: *United States v. California*, Report of the Special Master 77

1952: International Law Commission 78

Page

1953: International Law Commission 79

1954: International Law Commission 83

1955: International Law Commission 84

1955: U.S. Position on Cuban Decree No. 1948 85

1956: International Law Commission 86

1958: Geneva Convention on the Territorial Sea and the Contiguous Zone 87

1958: United States Brief in *United States v. Louisiana, et al.*, No. 11, Original 88

1958: Historic Bays Memorandum by the Secretariat of the United Nations, and illustration 89

1959: "Measurement of the U.S. Territorial Sea," by G. Etzel Pearcy, and illustration 91

1960: Letter from the Justice Department to the U.S.C. &G.S. Regarding the United States Position Concerning Islands Along Louisiana's Coast 93

1960: *United States v. Louisiana, et al.*, Supreme Court Decision 95

1961: Letter from the Solicitor General to the Director, U.S.C. &G.S. 96

1961: Memo from A. L. Shalowitz to the Director, U.S.C. &G.S. 99

1961: Letter from the Director, U.S.C. &G.S., to the Solicitor General 101

1961: Memorandum by A. L. Shalowitz of the U.S.C. &G.S. Attached to Admiral Karo's Response to the Solicitor General's Letter of March 6, 1961 103

1962: Shalowitz's Conception of the Chapman Line 107

Page

1962: Shalowitz Discussion of Fringing Islands Along Louisiana's Coast 109

1962: Shalowitz Discussion of Island Group Status Under the Geneva Convention on the Territorial Sea and the Contiguous Zone 111

1963: U.S. Brief in *United States v. California*— Straits Leading to Inland Waters 112

1963: U.S. Brief in *United States v. California*— 10-Mile Island Rule at Chandeleur Sound.....113

1963: U.S. Brief in *United States v. California*— 10-Mile Island Rule at Chandeleur Sound Versus Santa Barbara Channel 114

1963: U.S. Brief in *United States v. California*— U.S. Position on Straits Leading to Inland Waters off Cuba and Alaska 116

Portion of Map of Alaska from the Brief in Support of Exceptions of the State of California to the Report of the Special Master in *United States v. California*, No. 5, Original 119

1965: *United States v. California*, Supreme Court Decision 121

1966: *United States v. California*, Supplemental Decree 122

1968: United States Brief in *United States v. Louisiana*, No. 9, Original 123

1974: *United States v. Florida*, No. 52, Original, Report of Albert B. Maris, Special Master.....126

1863: Letter from U.S. Secretary of State Seward to Spanish Minister Gabriel Tassara

The undersigned has further ascertained, as he thinks, that the line of keys which confront other portions of the Cuban coast resemble, in dimensions, constitution and vicinity to the mainland, the keys which lie off the southern Florida coast of the United States. The undersigned assumes that this line of keys is properly to be regarded as the exterior coast line, and that the inland jurisdiction ceases there, while the maritime jurisdiction of Spain begins from the exterior sea front of those keys.

Letter dated August 10, 1863, which appears in 1 Moore *Digest of International Law*, p. 711 (1906), introduced into evidence before the Master as La. Exh. 356(3). Also see La. Exh. 154, 4 Whiteman, *Digest of International Law*, 274-75.

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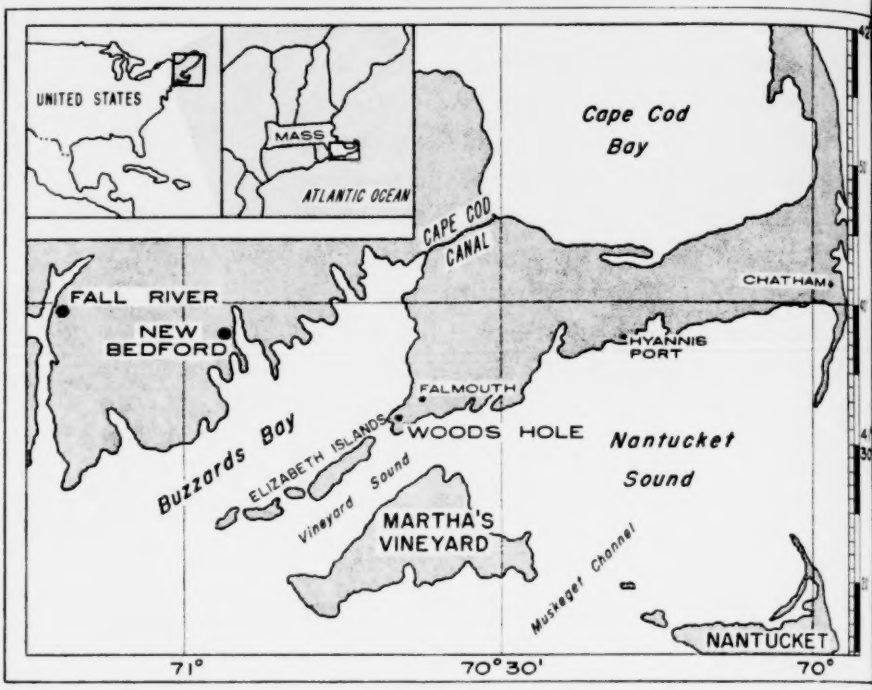
1891: United States Supreme Court in Manchester v. Massachusetts, 139 U.S. 240, 243

The Commonwealth further offered evidence tending to show that the distance between the *headlands at the mouth of Buzzard's Bay*, viz., at Westport, in the county of Bristol, on the one side, and *the island of Cuttyhunk*, in the county of Dukes, *on the other side*, was more than one and less than two marine leagues. The island of Cuttyhunk is the most southerly of the chain of islands lying to the eastward of Buzzard's Bay, and known as the Elizabeth Islands. The distance across said bay at the point where the acts of the defendant were done is more than two marine leagues, and the opposite points are in different counties. The defendant did not dispute any of the testimony offered by the Commonwealth . . . . (Emphasis added.)

Manchester v. Massachusetts, 139 U.S. 240, 243 (1891).

Map of Buzzard's Bay



BUZZARDS BAY

Strohl, *International Law of Bays* at 77.

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For or near the following bays the limits of exclusion shall be three marine miles seawards from the following lines, namely:

For or near Barrington Bay, in Nova Scotia, the line from the light on Stoddart Island to the light on the south point of Cape Sable, thence to the light at Baccaro Point; at Chedabucto and St. Peter's Bays, the line from Cranberry Island light to Green Island light, thence to Point Rouge; *for Mira Bay, the line from the light on the east point of Scatari Island to the northeasterly point of Cape Morien*; and at Placentia Bay, in Newfoundland, the line from Latine Point, on the eastern mainland shore, to the most southerly point of Red Island, thence by the most southerly point of Merasheen Island to the mainland.

Long Island and Bryer Island, on St. Mary's Bay, in Nova Scotia, shall, for the purpose of delimitation, be taken as the coasts of such bays. [Emphasis added.]

Finding #2 in the *North Atlantic Coast Fisheries Arbitration*, Scott *The Hague Court Reports*, 189 (1906).

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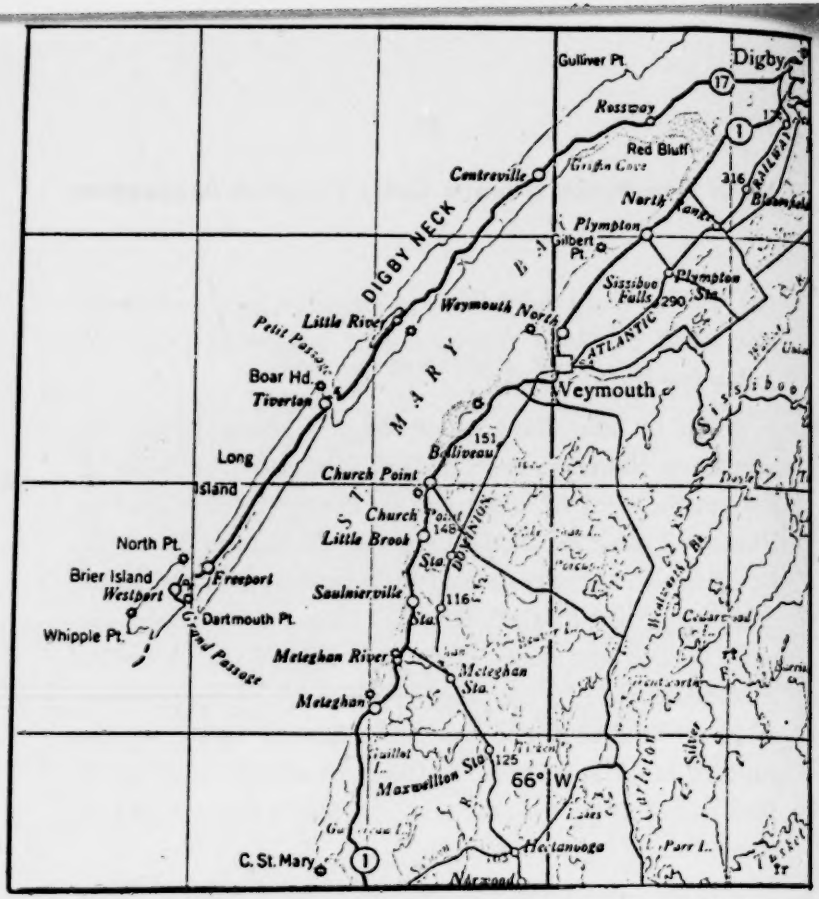
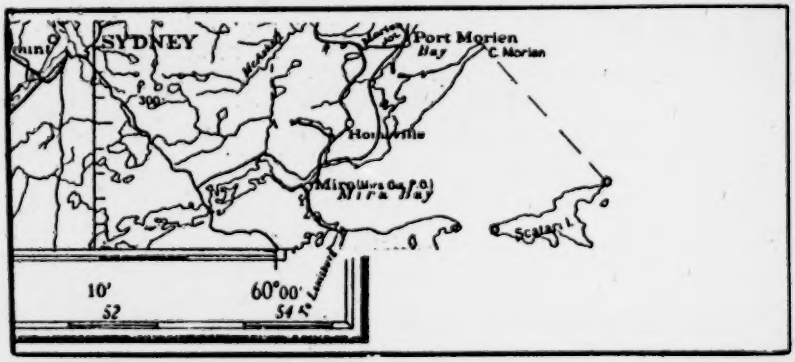


Portion of Yarmouth-Windsor map (Nova Scotia) published by the Canadian government showing Brier and Long Islands, which form the side of St. Mary Bay. (La. Exh. 325.)



Portion of Yarmouth-Windsor map (Nova Scotia) published by the Canadian government showing closing line designated for Mira Bay which utilizes Scatari Island as a headland.

1930: Hague Conference—International and United States Proposals Treating Island Groups and Straits Leading to Inland Waters

ANNEX I.

BASES OF DISCUSSION DRAWN UP BY THE PREPARATORY COMMITTEE, ARRANGED IN THE ORDER WHICH THAT COMMITTEE CONSIDERED WOULD BE MOST CONVENIENT FOR DISCUSSION AT THE CONFERENCE

* * * * *

Basis of Discussion No. 13.

In the case of a group of islands which belong to a single State and at the circumference of the group are not separated from one another by more than twice the breadth of territorial waters, the belt of territorial waters shall be measured from the outermost islands of the group. Waters included within the group shall also be territorial waters.

The same rule shall apply as regards islands which lie at a distance from the mainland not greater than twice the breadth of territorial waters.

Basis of Discussion No. 17

Where a strait is merely a channel of communica-

U.S. Exh. 74, League of Nations, Acts of the Conference for the Codification of International Law, Held at the Hague from March 13th to April 12, 1930, III Minutes of the Second Committee, Territorial Waters, C.351(b). M.145(b) 1930.

tion with an inland sea, the rules regarding bays apply to such strait and sea.

— — — — — — — —

ANNEX II.

OBSERVATIONS AND PROPOSALS REGARDING THE BASES OF DISCUSSION PRESENTED TO THE PLENARY COMMITTEE BY VARIOUS DELEGATIONS.

Japan.

AMENDMENTS TO BASES OF DISCUSSION NOS. 4, 5, 8, 9, 11, 13, 14, AND 15, CIRCULATED TO THE MEMBERS OF THE COMMITTEE ON MARCH 18TH, 1930.

Basis of Discussion No. 13.

1. Delete the first sentence of the first paragraph from the words "twice the breadth of territorial waters" to the end, and substitute the words "ten miles", and add immediately afterwards the following sentence: "The whole group shall be regarded as a single unit".

2. Omit the second sentence of the first paragraph.

3. In the second paragraph, substitute for the words "twice the breadth of territorial waters", the words "ten miles".

The article as revised will read as follows:

> "In the case of a group of islands which belong to a single State and at the circumference of the group are not separated from one another

by more than *ten miles, the whole group shall be regarded as a single unit.* The same rule shall apply as regards islands which lie at a distance from the mainland not greater than *ten miles.*" [p. 189.]

AMENDMENTS TO BASES OF DISCUSSION NOS. 3 AND 6, 7, 8, 9 AND 18, 12, 13 AND 14, 10, 11, 15, 16, 17, AND PROPOSALS FOR THREE NEW BASES OF DISCUSSION CIRCULATED TO THE MEMBERS OF THE COMMITTEE ON MARCH 27TH, 1930.

These Bases are submitted in the interest of finding a set of formulae for the delimitation of territorial waters which shall be simple in application and definite in result. This is believed to be the first attempt to formulate a comprehensive and systematic body of rules for this purpose, and it is suggested that they be studied objectively, so far as practicable, on charts and maps. Two pages of diagrams are attached to illustrate the text.

* * * *

F. Straits.

Bases of Discussion Nos. 15, 16 and 17.

The delimitation of territorial waters in straits shall be made in the following manner:

* * * *

3. In the absence of agreement to the contrary, where a strait is merely a channel of communication with an inland sea, the rules regarding bays apply to such strait.

G. Simplification and Assimilation.

New Basis of Discussion.

1. Where the delimitation of territorial waters would result in leaving a small area of high sea totally surrounded by territorial waters of one or more States, the area is assimilated to the territorial waters of such State or States.

2. Where the delimitation of territorial waters, as prescribed in the foregoing articles, results in a pronounced concavity such that a single straight line, not more than four nautical miles in length, drawn from the envelope of the arcs of circles on one side to the envelope of the arcs of circles on the other side entirely closes an indentation, the coastal State may regard the body of water enclosed within the envelope of the arcs of circles and said straight line as an extension of its territorial waters if the area exceeds the area of a semi-circle whose diameter is equal to the length of the straight line; if the coastal State chooses to assimilate these waters it shall notify the nations which may be interested therein. [pp. 197-201]

Appendix 2.

REPORT OF THE SECOND SUB-COMMITTEE.

* * * *

GROUPS OF ISLANDS

Observations.

With regard to a group of islands (archipelago) and islands situated along the coast, the majority of the Sub-Committee was of opinion that a distance of

ten miles should be adopted as a basis for measuring the territorial sea outward in the direction of the high sea. Owing to the lack of technical details, however, the idea of drafting a definite text on this subject had to be abandoned. The Sub-Committee did not express any opinion with regard to the nature of the waters included within the group.

STRAITS.

Observations.

The application of the article is limited to straits which serve as a passage between two parts of the high sea. It does not touch the regulation of straits which give access to inland waters only. As regards such straits, the rules concerning bays, and, where necessary, islands, will continue to be applicable. [pp. 217-20]

1930: S. W. Boggs's Explanation of the United States Proposal at the Hague Conference

Efforts of the conference to define a group of islands, in terms of numbers, size, and relative position of islands, did not produce practical results. The real reason for making a special case of islands is that the three-mile envelope leaves undesirable pockets. It is the American viewpoint that the only practicable way to eliminate these pockets is to consider the pockets as pockets, rather than to consider the islands as islands. *It is believed that the general proposal for the assimilation of anomalous pockets of high sea by a geometrical means avoids the definition of a "group of islands,"* just as the geometrical solution of the proposal relating to bays avoids the definition of "bays," and that in both cases the desired results are obtained in an entirely satisfactory manner. [Emphasis added.]

U.S. Exh. 75, Boggs, "Delimitation of the Territorial Sea: The Method of Delimitation Proposed by the Delegation of the United States at the Hague Conference for the Codification of International Law," 24 *American Journal of International Law* 541 (1930).

1940: Census Bureau Delimitation of Internal Waters

A solution for the problem of setting outer limits for the United States was obtained by special adaptations, pertaining to embayments and islands, of the excellent principles established by S. W. Boggs, Geographer of the Department of State, in delimiting the territorial waters of the United States.[94] These adaptations of Boggs' principles resulted in the following rules for delimiting coastal and Great Lakes water,[95] and thereby, in part, for setting the outer water limits of the United States (fig. 8): *(1) where the coast line is regular it shall be followed directly unless there are off-shore islands within ten nautical miles*;[96] (2) where embayments occur having headlands of less than ten and more than one nautical mile in width, a straight line connecting the headlands shall set the limits;[97] however, (3) the coast line shall be followed if the indentation of the embayment is so shallow that its water area is less than the area of a semicircle drawn using the said straight line as a diameter;[98] and *(4) two or more islands less than ten and more than one nautical mile from shore shall be connected by a straight line or lines, and other straight lines shall be drawn to the shore from the nearest point on each end island.*[99] [Emphasis added.]

La. Exh. 52(1), Proudfoot, *Measurement of Geographic Area*, Dept. of Commerce, Bureau of the Census (1946) p. 33.

[94]Boggs, S. W., "Delimitation of the Territorial Sea, The Method of Delimitation Proposed by the Delegation of the United States at the Hague Conference for the Codification of International Law," *American Journal of International Law*, Vol. 24 (July, 1930), 541-555.

[95]Termed "State water" and not subdivided among adjoining counties or minor civil divisions.

[96]See Atlantic coastal strip, C. of fig. 8., plate I.

[97]See Atlantic coastal strips A. and B. of fig. 8., plate I.

[98]See Pacific coastal strips H., J., K. and L. of fig. 8., plates XII and XIII.

[99]See treatment of Florida Keys, Atlantic coastal strip Q. of fig. 8.

1951: Letter from the United States State Department to the Justice Department Explaining National Position on International Law of the Sea

With respect to a strait which is merely a channel of communication to an inland sea, however, the United States took the position, with which the second subcommittee agreed, that the rules regarding bays should apply (Act of Conference, 201, 220).

U.S. Exh. 93, a letter from James E. Webb, State Department, to J. H. McGrath, Justice Department, dated November 13, 1951, also published in Appendix D of 1 Shalowitz *Shore and Sea Boundaries*, pp. 354-56 (1962).

1952: United States v. California, Report of the Special Master

Straits

Subject to the special case of historical waters, the position of the United States as to straits connecting two areas of open sea, as set forth by the Secretary of State (*ante* p. 14), is that if both entrances are less than six nautical miles wide the strait is territorial waters but never inland waters. Otherwise, the marginal belt is to be measured in the ordinary way. *If the strait is merely a channel of communication to an inland sea the ten-mile rule regarding bays should apply.* [Emphasis added.]

Report of the Special Master in *United States v. California*, No. 6, Original, October Term, 1952, 332 U.S. 19. Submitted October 14, 1952; Filed November 10, 1952, p. 27.

1952: International Law Commission

The International Law Commission's Special Rapporteur for the regime of the territorial sea, J. P. A. François, included in his first report in 1952 the following articles and comments on reefs, islands, and groups of islands: [p. 295]

* * * *

"[*Article 10. Groups of Islands:*] With regard to a group of islands (archipelago) and islands situated along the coast, the ten-mile line shall be adopted as the base line for measuring the territorial sea outward in the direction of the high sea. The waters included within the group shall constitute inland waters.

"*Comment* [p. 296]

* * * *

"3. The Rapporteur has inserted article 10 not as expressing the law at present in force, but as a basis of discussion should the Commission wish to study a text envisaging the progressive development of international law on this subject." A CN.4 53, pp. 28-30; II *Yearbook of the International Law Commission 1952*, pp. 25, 33, 36-37. [p. 297]

4 *Whiteman* 295-97.

1953: International Law Commission

François' second report to the International Law Commission in February 1953 effected the following changes (II *Yearbook of the International Law Commission 1953*, pp. 57, 65-70):

* * * *

The final sentence of article 10 which had read that the waters within a group of islands constituted inland waters (also *supra*) was deleted,

* * * *

At the invitation of Professor François, a five-man group of technical experts, acting in their personal capacity, met at The Hague from April 14 to 16, 1953, in order to examine certain questions of a technical nature raised during the discussions of the International Law Commission. (For the membership of the Committee of Experts, see *ante*, p. 146.) Questions submitted by the Special Rapporteur to the Committee of Experts together with the answers of the latter regarding delimitation of reefs and islands were as follows:

* * *

III

"If the low-water line may be replaced by a straight base-line, as indicated by the International Court of Justice in the Anglo-Norwegian Fish-

4 *Whiteman* 297-98.

eries Case, what technical questions may arise as to

. . . . . .

"C. the islands, rocks and shallow waters within T miles before the coast (T standing for the width of the territorial sea)?

. . . . . .

"2. Such 'straight base-lines' might be drawn —if specifically justified by international law— between headlands on the coastline or between such headlands and islands less than 5 miles from the coast or between such islands, provided such headlands and or islands are not further than 10 miles apart.

"3. The Committee considered that between three or more islands at a distance of less than 5 miles from each other, 'straight base-lines' might be drawn. In that case, these islands constitute a *group*. Waters lying within the outer base-lines around a group should be considered as inland waters.

"4. The Committee recognizes as a special case a group of islands in which one, but only one, of the said connecting lines exceeds 5 miles though not 10 miles in length. This case may be called a 'fictitious bay'.

"5. A 'fictitious bay' may also be formed by a string of islands taken together with a portion of the mainland coastline as provided for under 2 B.

"6. The Committee agreed that 'straight base-lines' should not be drawn to and from dry-

ing rocks and shoals. Their part in measuring the territorial sea has been stated sub I."

Report of the Committee of Experts, April 1953, contained in Addendum to the Second Report on the Regime of the Territorial Sea by J. P. A. François, Special Rapporteur, A/CN.4/61/Add.1, Annex, May 18, 1953, pp. 1-4.

François' First Report, Apr. 4, 1952, Doc. A/CN.4/53, is printed in II *Yearbook of the International Law Commission 1952*, pp. 25, 32-33, 36-37. François' Second Report, Doc. A/CN.4/61, Feb. 19, 1953, is printed in II *Yearbook of the International Law Commission 1953*, pp. 57, 65, 67, 68-70. The addendum to the Second Report, Doc. A/CN.4/61/Add. 1, by François, together with the annexed Report of the Committee of Experts, is printed *ibid.*, pp. 75, 77, 78.

As a result of the Experts' Report, François submitted the following amendment and additions to his second report in May of 1953:

* * * *

"*Article 5a*

. . . . . .

"2. In general, the maximum permissible length for a straight base-line shall be 10 miles. The base-lines may be drawn between headlands on the coastline or between such headlands and islands, provided such headlands and/or islands are not further than 10 miles apart. The base-lines should not be drawn to and from drying rocks and shoals. These lines constitute the delimi-

4 *Whiteman* 299-300.

tation between inland waters and the territorial sea.

. . . . . .

"[Article 9. Islands (unchanged).]

"*Article 10*

"*Group of islands*

"Article 10 is modified as follows:

"1. Between three or more islands at a distance of less than 5 miles from each other, a 'straight base-line' may be drawn. In that case, these islands constitute a *group*. Waters lying within the outer base-lines around a group shall be considered as inland waters.

"2. A group of islands in which one, but only one, of the said connecting lines exceeds 5 miles though not 10 miles in length, constitutes a "fictitious bay'.

"3. A 'fictitious bay' may also be formed by a string of islands taken together with a portion of the mainland coastline as provided under article 6, paragraph 5." (A.CN.4/61/Add.1, pp. 5-6, 7.)

Addendum to François' Second Report, May 18, 1953, printed in II *Yearbook of the International Law Commission, 1953*, pp. 75, 76, 77.

1954: International Law Commission

In his third report in February 1954, François simplified his draft text on reefs to read:

* * * *

As to "Groups of islands", the third report and comment read:

> "[*Article 12. Groups of Islands:*] 1. The term 'group of islands', in the juridical sense, shall be deemed to mean three or more islands enclosing a portion of the sea when joined by straight lines not exceeding five miles in length, except that one such line may extend to a maximum of ten miles.
>
> "2. The straight lines specified in the preceding paragraph shall be the base lines for measuring the territorial sea; waters lying within the area bounded by such base lines and the islands themselves shall be considered as inland waters.
>
> "3. A group of islands may likewise be formed by a string of islands taken together with a portion of the mainland coastline. The rules set forth in paragraphs 1 and 2 of this article shall apply *pari passu*.
>
> "*Comment*
>
> "Sub-Committee II of the 1930 Conference abandoned the idea of drafting a text on this subject. The Committee of Experts endeavoured to provide also for this case. In drafting the article, the rapporteur followed the Committee's suggestions." (*Ibid.*, p. 13.)

4 *Whiteman* 300-01.

1955: International Law Commission

At its seventh session, held in 1955, the International Law Commission did not modify its 1954 text of article 10. It commented:

> "The Commission had intended to follow up this article with a provision concerning groups of islands. Like The Hague Conference for the Codification of International Law of 1930, the Commission failed to overcome the difficulties in the way of carrying out this intention.... Moreover, article 5 [on straight base lines] may be applicable to groups of islands situated off the coasts, while the general rules will normally apply to other islands forming a group." *Report of the International Law Commission Covering the work of its seventh session, 2 May-8 July 1955*, U.N. Gen. Ass. Off. Rec. 10th Sess., Supp. No. 9 (A/2934), p. 18. [For text evolved at its eighth session, with commentary, see *ante*, pp. 294-295.]

4 *Whiteman* 303.

1955: U.S. Position on Cuban Decree No. 1948:

"Cuban Law Decree No. 1948 of January 25, 1955, stated in article I that: 'The waters between the coasts of the Island (of Cuba) and all adjacent keys, when the distance between them and between the keys themselves does not exceed 10 miles, are declared interior seas.' [Amembassy, Habana, to the Department of State, despatch No. 776, Feb. 11, 1955.] The U.K. and U.S. *protested other portions of this law....* [Emphasis added.]

4 *Whiteman* 275.

1956: International Law Commission

The text evolved by the International Law Commission with respect to islands (article 10), and contained in its 1956 and final report, together with its Commentary thereon, read:

"*Article 10*

"Every island has its own territorial sea. An island is an area of land, surrounded by water, which in normal circumstances is permanently above high-water mark.

"*Commentary*

* * * *

"(3) The Commission had intended to follow up this article with a provision concerning groups of islands. Like The Hague Conference for the Codification of International Law of 1930, the Commission was unable to overcome the difficulties involved. The problem is singularly complicated by the different forms it takes in different archipelagos. The Commission was prevented from stating an opinion, not only by disagreement on the breadth of the territorial sea, but also by lack of technical information on the subject. It recognizes the importance of this question and hopes that if an international conference subsequently studies the proposed rules it will give attention to it.

"(4) The Commission points out, for purposes of information, that article 5 may be applicable to groups of islands lying off the coast."

Report of the International Law Commission Covering the work of its eighth session, 23 April-4 July 1956, U.N. Gen. Ass. Off. Rec. 11th Sess., Supp. No. 9 (A/3159), pp. 16-17; II *Yearbook of the International Law Commission 1956*, pp. 253, 270.

4 *Whiteman* 294-95.

1958: Geneva Convention on the Territorial Sea and the Contiguous Zone

Article 10 of the Convention on the Territorial Sea and the Contiguous Zone, concluded in 1958 at the Geneva Conference on the Law of the Sea, contains the following provisions with reference to islands:

> "1. An island is a naturally-formed area of land, surrounded by water, which is above water at high-tide.
>
> "2. The territorial sea of an island is measured in accordance with the provisions of these articles."

U.N. Doc. A/CONF.13/L.52; II *U.N. Conference on the Law of the Sea, Plenary Meetings*, pp. 132, 133; S. Ex. J, 86th Cong., 1st sess., pp. 14, 16; XXXVIII *Bulletin*, Department of State, No. 992, June 30, 1958, pp. 1111, 1112. Entered into force Sept. 10, 1964. U.S. TIAS 5639; 15 UST 1606, 1609.

1958: U.S. Brief in United States v. Louisiana, et al., No. 11, Original

While the United States denies that the phrase, "including all islands within three leagues of the coast," described any submerged land, we do agree that Louisiana is entitled, though for a different reason, to the submerged lands between its islands and mainland. *It happens that all the islands on the coast of Louisiana are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters*; consequently the lands underlying those waters necessarily passed to the State upon its entry into the Union. *Pollard v. Hagan*, 3 How. 212. Thus the islands, together with the line marking the outer limit of the intervening inland waters, constitute the "coast" of Louisiana in the sense of the Submerged Lands Act. *We make this explanation lest the dispute over the meaning of the Act of Admission should give the impression that the submerged lands within the islands are contested here.* We likewise concede the State's right to the submerged lands within three miles seaward of the islands, under the ordinary three-mile rule. We deny its right to more. [Emphasis added.]

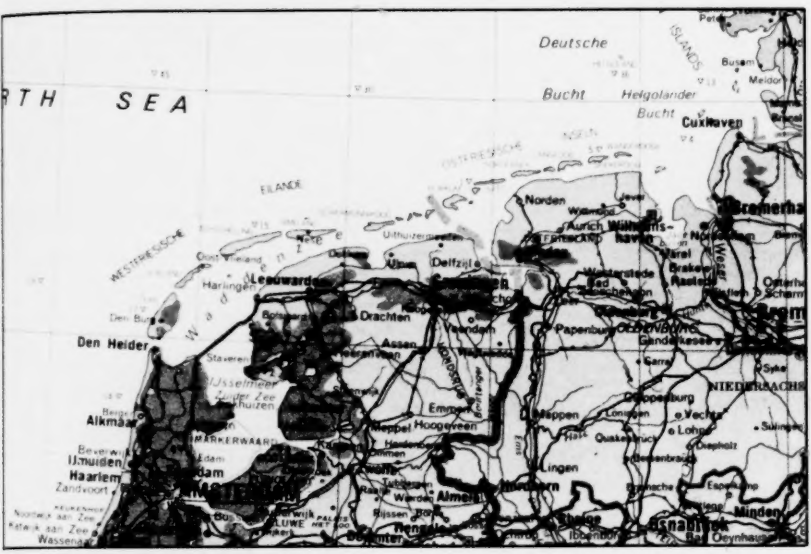
Brief for the United States in Support of Motion for Judgment on Amended Complaint in *United States v. Louisiana, et al.*, No. 11, Original, May 15, 1958, pp. 177-78.

1958: Historic Bays Memorandum by the Secretariat of the United Nations

The Zuyder Zee

* * * *

34. The Netherlands title to this sea can be based not only on a historic right proper but also on ordinary



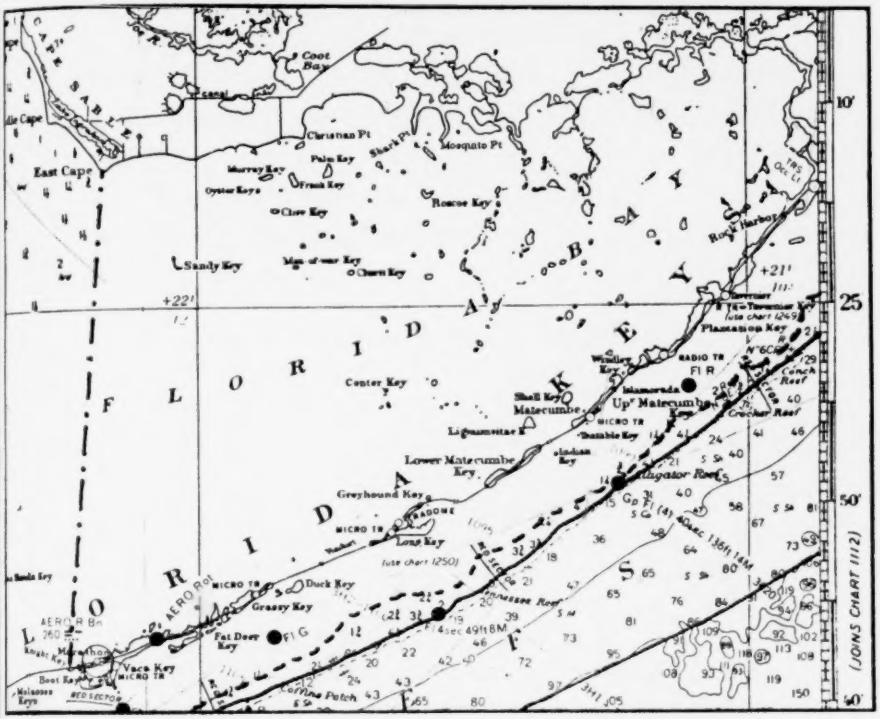
international law. A. Chrétien,[35] who does not admit the theory of historic bays (see *infra*, para. 92) con-

U.S. Exh. 97, *Historic Bays*, Memorandum by the Secretariat of the United Nations, United Nations Conference on the Law of the Sea, Official Records, Vol. 1; Preparatory Documents (A/CONF. 13/37), p. 7, and Portion of Map of Holland from Rand-McNally *THE International Atlas*, p. 30.

cedes nevertheless that certain small bays, among others the Zuyder Zee, should be regarded as subject to the full and absolute sovereignty of the coastal State. Gidel[36] mentions the Zuyder Zee among the maritime areas which are sometimes designated as historic "but which should not be treated as falling within that category [of historic waters] because pursuant to the rules of the ordinary international law of the seas these areas are in any case internal waters".

1959: "Measurement of the U.S. Territorial Sea," by G. Etzel Pearcy, Geographer, Department of State, XL Bulletin, Department of State, No. 1044, June 29, 1959.

"The Convention on the Territorial Sea and the Contiguous Zone limits the entrance of any bay to not


East Cape
Sandy Key
Coot Bay
Christian Pt
Shark Pt
Mosquito Pt
Murrey Key
Palm Key
Oyster Key
Frank Key
Clive Key
Ronco Key
Center Key
Shell Key
Matecumbe
Up Matecumbe Key
Lower Matecumbe Key
Indian Key
Alligator Reef
Greyhound Key
Long Key
Duck Key
Grassy Key
Fat Deer Key
Vaca Key
Boot Key
Molasses Keys
Conch Reef
Crocker Reef
Tennessee Reef
Flamingo Key
Whitney Key
Mamoranda
Bamble Key
Lignumvitae
Rock Harbor
Carysfort Reef
Key Largo
Plantation Key
Conch Key
Duck Key
Key West
Marathon
Looe Key
Sombrero Key
Content Key
Pigeon Key
Big Pine Key
Little Duck Key
Ramrod Key
Summerland Key
Cudjoe Key
Sugarloaf Key
Saddlebunch Keys
Boca Chica Key
Stock Island
Rockland Key
Big Coppitt Key
Rockland
Middle Key
Sawyer Key
Bahia Honda Key
Big Pine Key
Little Duck Key
Ramrod Key
Summerland Key
Cudjoe Key
Sugarloaf Key
Saddlebunch Keys
Boca Chica Key
Stock Island
Key West
Rockland Key
Big Coppitt Key
Rockland
Middle Key
Sawyer Key
Bahia Honda Key
Content Key
Pigeon Key
Looe Key
Sombrero Key
Marathon
Key Largo
Plantation Key
Conch Key
Duck Key
Whitney Key
Mamoranda
Bamble Key
Lignumvitae
Rock Harbor
Carysfort Reef
Conch Reef
Crocker Reef
Tennessee Reef
Flamingo Key
Summerland Key
Cudjoe Key
Sugarloaf Key
Saddlebunch Keys
Boca Chica Key
Stock Island
Key West
Rockland Key
Big Coppitt Key
Rockland
Middle Key
Sawyer Key
Bahia Honda Key
Big Pine Key
Little Duck Key
Ramrod

more than 24 nautical miles. In event that the distance between the natural entrance points of a bay exceeds that distance, a straight baseline of 24 miles is drawn within the bay in such a way as to enclose the maximum water area that is possible with a line of that length. Figure 3 [*infra*] illustrates the principle diagrammatically. The rule has practical application in Florida, where a closing line 24 miles in length extends from East Cape to Vaca Key to close off the maximum amount of water between the coast of Florida and the chain of keys curving south and east.

1960: Letter from the Justice Department to the U.S.C.&G.S. Regarding the United States Position Concerning Islands Along Louisiana's Coast

"This [the position of the U.S. regarding inland waters behind island fringes] is borne out by the letter dated February 29, 1960, from Honorable J. Lee Rankin, Solicitor General of the United States, to Rear Admiral H. Arnold Karo, Director Coast and Geodetic Survey, Department of Commerce, Washington 25, D.C., with a copy to Raymond T. Yingling, Assistant Legal Adviser, Department of State, and to Dr. G. Etzel Pearcy, Geographer, Department of State, in which Mr. Rankin stated:

> "On July 6, 1950, in response to a specific inquiry in connection with the case of United States v. Louisiana, 339 U.S. 699, the State Department advised us that Chandeleur Sound should be considered inland water. *On October 26, 1950, in the same connection, Dr. Boggs, then Geographer of the State Department, joined with representatives of the Department of the Interior and this Department in describing, on that basis, a line, (commonly referred to as the "Chapman Line") to represent the official position of the United States as to the coast line of Louisiana, that is, the base line for the three-mile belt.* We followed this position in our brief in support of our motion for judgment on the amended complaint in the related

Louisiana Brief before the Special Master, Vol. I, Part 1, pp. 59-60, quoting from La. Exh. 283(20).

case of United States v. Louisiana, et al., No. 11, Original, October Term, 1957, at page 177; a draft of that brief was submitted to the State Department in May, 1958, before it was filed, and no question was raised on this point. The position was repeated at pages 43-44 of our reply brief in the same case, a draft of which was likewise submitted to the State Department in August 1958. At that time, Mr. Yingling, Assistant Legal Adviser, did raise a question regarding Chandeleur Sound; but at a conference between him, Dr. Pearcy, and John F. Davis and George S. Swarth of this Department, it was agreed that we should continue to concede that the Sound is inland water. Because of this concession, it was unnecessary for Louisiana to press certain aspects of its argument as it might otherwise have wished to do." [Emphasis added.]

1960: United States v. Louisiana, et al., Supreme Court Decision

The Government concedes that *all the islands which are within three leagues of Louisiana's shore* and therefore belong to it under the terms of its Act of Admission, *happen to be so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters.* Thus, Louisiana is entitled to the lands beneath those waters quite apart from the affirmative grant of the Submerged Lands Act, under the rule of *Pollard's Lessee* v. *Hagan.* 3 How. 212. Furthermore, *since the islands enclose inland waters, a line drawn around those islands and the intervening waters would constitute the "coast" of Louisiana within the definition of the Submerged Lands Act.* Since that Act confirms to all States rights in submerged lands three miles from their coast, the Government concedes that Louisiana would be entitled not only to the inland waters enclosed by the islands, but to an additional three miles beyond those islands as well. We do not intend, however, in pasing on these motions, to settle the location of the coastline of Louisiana or that of any other State. [Emphasis added.]

United States v. Louisiana, et al., 363 U.S. 1, 67 n. 108 (1960).

1961: Letter from the Solicitor General to the Director, U.S.C.&G.S.

March 6, 1961

Rear Admiral H. Arnold Karo
Director
Coast and Geodetic Survey
Department of Commerce
Washington, D. C.

Dear Admiral Karo:

In the case of *United States* v. *Louisiana et al.*, No. 10, Original, involving ownership of offshore submerged lands in the Gulf of Mexico, the Supreme Court's opinions of May 31, 1960 (363 U.S. 1 and 121), and decree of December 12, 1960, establish the dividing line between the federal and state property rights at a distance of three geographical miles from the coast lines of Louisiana, Mississippi, and Alabama and three leagues from the coast lines of Texas and Florida. The coast line is defined, as in the Submerged Lands Act, as the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters.

We are now faced with the problem of giving precise application to the rather general terms of that decision. . . .

* * * *

La. Exh. 178, pp. 1-4, Letter from Archibale Cox, Solicitor General, to Admiral Karo, Director of the U.S.C.&G.S., dated March 6, 1961.

It will be necessary ultimately to establish a precise line as to all five of the Gulf States, but the solution of the problem is particularly important with respect to Louisiana, where a great deal of present production is involved. We therefore intend to proceed with respect to Louisiana first. As a basis for discussion, we have asked the Interior Department to furnish a proposed description of the coast line of Louisiana, based on the joint survey which it has been making with the State. I enclose a copy of the description prepared, in response to that request, by Mr. Donald B. Clement of the Division of Cadastral Engineering, Bureau of Land Management, to which I have added paragraph numbers for convenience of reference. I also enclose a memorandum written by Mr. George Swarth of this Department, commenting on Mr. Clement's proposed description, comparing it with the earlier description known as the Chapman Line and with maps prepared last year by Dr. G. Etzel Pearcy, the Geographer of the Department of State, and raising certain questions for further consideration.

In supporting our position as to the location of the coast line, it will be necessary to formulate the principles on which the description has been developed. I would like to submit for your consideration some statements of principles, derived from various sources, including the letter of November 13, 1951, from Acting Secretary of State James E. Webb to Attorney General J. Howard McGrath and the 1958 Convention on the Territorial Sea and Contiguous Zone.

* * * *

The principles that I suggest are as follows:

* * * *

(g) Waters enclosed between the mainland and off-lying islands which are so closely grouped that no entrance exceeds ten miles in width shall be considered inland waters.

* * * *

There are of course many questions raised by the foregoing propositions or by matters not covered by them. In particular, I should be glad to have your views on the following:

* * * *

(b) Under what circumstances should the coast line depart from the mainland to embrace offshore islands?

* * * *

(e) How are the 10-mile and semicircle rules applied to a series of adjoining and interconnected bays and screening islands such as are found along the south coast of Louisiana?

1961: Memo from A. L. Shalowitz to the Director, U.S.C.&G.S. (Karo)

[To] The Director March 10, 1961

[From] A. L. Shalowitz

Letter from Solicitor General

This is to bring to your attention the scope of the Solicitor General's request and what it will entail to prepare an appropriate reply which we may be called upon to back in any future litigation that may arise between the Federal Government and the State of Louisiana, in the event an agreement cannot be reached on the controversial aspects of the boundary problem.

1. As stated by the Solicitor General, "the questions involved relate to matters within the particular competence of the Coast and Geodetic Survey."

2. As I envision the request, it will involve the following:

(a) A critical study and analysis of the Louisiana boundary description prepared by the Bureau of Land Management.

(b) An evaluation of the comments by the Department of Justice in relation to the boundary description and the maps prepared by the Department of State.

(c) A study of the principles proposed by the De-

partment of Justice and the specific technical questions raised, all considered in the light of the position advocated by the United States at the 1930 Hague Conference for the Codification of International Law; of the "Chapman Line," which we helped formulate in 1950 and which was promulgated by the Government as the tentative boundary between Federal and State (Louisiana) rights; of the proceedings before the Special Master in the *California* case with which the Bureau was closely associated; of the technical recommendations of the Special Master to the Supreme Court; of the pertinent recommendations of the International Law Commission in 1956, considered in the light of the work of the Committee of Experts in 1953 (the State Department representative was in close touch with the Bureau on questions raised by the ILC); and finally of the Convention adopted at Geneva in 1958 on the Territorial Sea and the Contiguous Zone.

1961: Letter from Director, U.S.C.&G.S. to Solicitor General

"Honorable Archibald Cox
The Solicitor General of
the United States
Department of Justice
Washington 25, D.C.

My dear Mr. Solicitor General:

This is in reply to your letters of March 6 and March 22, 1961 (File 90-1-18-260), asking this Bureau's assistance and advice in formulating principles and procedures by which the term "coast line" as used in the Supreme Court's decree of December 12, 1960, may be given precise application to the Louisiana coast. The enclosed Memorandum, prepared by Mr. A. L. Shalowitz, of my staff, sets forth our views on the various questions raised in your letter of March 6. . . .

* * * *

The following materials were consulted in the preparation of the Memorandum: Supreme Court's Decree of December 12, 1960; charts showing the Pearcy line (1960); 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone; final report of the International Law Commission on the Law of the Sea (1956); Report of the Special Master in

La. Exh. 178, pp. 29-30, Letter from Admiral Karo, Director, U.S.C.&G.S., to Archibald Cox, Solicitor General, dated April 18, 1961, in response to Cox's letter of March 6, 1961. [Retyped verbatim from La. Exh. 178.]

the *California* case (1952); Letter of November 13, 1951, from Acting Secretary of State Webb to Attorney General McGrath; the Chapman Line description of 1950; Bases of Discussion submitted by the United States Delegation to the 1930 Hague Conference; Findings of the North Atlantic Fisheries Tribunal of 1910; and United States Coast and Geodetic Survey hydrographic surveys H-999 and M-1000, of 1869.

I trust this Memorandum will be of help to the Department of Justice in formulating the United States position in the pending litigation.

Sincerely,

(Signed) H. Arnold Karo

Rear Admiral, USC&GS
Director

Enclosure

MEMORANDUM IN REPLY TO LETTER OF MARCH 6, 1961, FROM THE SOLICITOR GENERAL, RE THE LOUISIANA COAST LINE

PART I

COMMENTS ON PRINCIPLES PROPOSED BY DEPARTMENT OF JUSTICE

* * * *

Item (g)

This principle is concurred in and is in conformity with the principle recommended in Part II, Item (b). It would probably be difficult to make this rule more specific because of the great variety of coastal configurations that might be encountered. Each case would call for a consideration on the merits and an equitable solution arrived at.

* * * *

PART II

RECOMMENDATIONS RE QUESTIONS RAISED BY DEPARTMENT OF JUSTICE

* * * *

Item (b)

RECOMMENDATION

The coast line should not depart from the mainland to embrace offshore islands, except where such islands either form a portico to the mainland and are

La. Exh. 178, pp. 31-68, Memorandum by A. L. Shalowitz of the U.S.C.&G.S. attached to Admiral Karo's response, dated April 18, 1961, to Solicitor General Cox's letter of March 6, 1961.

so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters, or they form an integral part of a land form.

Commentary

(1) The first part of the recommendation is based on the position of the Government as enunciated in the letter of November 13, 1951 (par.(e)), from Acting Secretary of State Webb to Attorney General McGrath. This was the position taken by the Department of Justice in the *California* case and which the Special Master upheld. Under this part of the recommendation, each island, whether isolated or part of a group, would carry its own territorial belt. This is readily understood and easy to apply, and no additional rules are necessary, such as the ratio of the area of an island to the water area between it and the mainland. Where an island is within the territorial sea, drawing the coast line so as to embrace the island would have little effect on the extent of the intervening submerged lands. For any other situation, there is greater reason why they should be excluded from the coast line.

(2) The second part of the recommendation (the exceptional part) deals with situations characteristic of the Louisiana coast and did not arise in the *California* case. It was the basis for drawing the Chapman Line and is in conformity with the concession made by the Government in its Brief in the *Louisiana* case (p. 177).

(3) When the 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone becomes operative and it becomse permissible to take coastal islands into account for the purpose of drawing straight baselines between appropriate points but which "must not depart to any appreciable extent from the general direction of the coast," the difficulty of laying down specific rules for applying the general criteria of the convention should be recognized. The ultimate solution may lie in studying each case on the basis of the general criteria, but using the skjaorgaard coast of Norway as the limiting condition of conformity to the criteria.

(4) Insofar as determining which islands form part of a land form and which do not, no precise standard is possible. Each case must be considered within the framework of the principal rule. One indication of homogeneity might be a common low-water line.

Item (e)

RECOMMENDATION

In applying the 10-mile rule to a group of screening islands along a coast, no opening between such islands should exceed 10 miles. . . .

Commentary

(1) Limiting the distance between screening islands along a coast to 10 geographic miles is in accord with the general policy of the United States regarding minimum encroachment upon the high seas.

(2) The theory of the screening islands is that the waters between them and the mainland are sufficiently enclosed to constitute inland waters (see Part I, Item (g)). Hence, the openings are in the nature of straits leading to inland waters, which in accordance with the State Department Letter of November 13, 1951, the rules for bays apply. A 10-mile limitation on the entrance width of a bay is one of those rules.

1962: Shalowitz's Conception of the Chapman Line

73. APPLICATION TO LOUISIANA COAST

As in the *California* case, the decree entered by the Court in *United States* v. *Louisiana*, 340 U.S. 899 (1950), was couched in the same general terms and described the lands involved as "lying seaward of the ordinary low-water mark on the coast of Louisiana, and outside of the inland waters." But, whereas, in the former, stipulations were entered into between California and the Federal Government as to the exclusion of certain areas from the operative effect of the Supreme Court decision (*see* 211), and other controversial areas were referred to a Special Master (*see* 2111), no such stipulations were entered into in the *Louisiana* case. Instead, the Secretary of the Interior promulgated tentative arrangements, subject to future congressional action, for the continuance of operations under state leases seaward of the low-water line and outside the limits of inland waters.[1] In order that the area subject to federal jurisdiction be known, particularly for some of the complex areas along the Louisiana coast, a jurisdictional line was adopted seaward of which the submerged lands were under the jurisdiction of the Federal Government.[2] Because the line was promulgated during the tenure of Secretary of the Interior Chapman it came to be known as the "Chapman Line."

1 Shalowitz, *Shore and Sea Boundaries*, 108.

731. The Chapman Line—Its Technical Basis

The Chapman line was intended to represent graphically the ordinary low-water mark and the seaward limits of inland waters along the Louisiana coast.[6] Its description and plotting on the charts represented an effort to apply, as accurately as possible, the principles of delimitation advocated by the United States in the proceedings before the Special Master.[7] . . .

[7] *These principles had been developed in international law or had been promulgated by the United States in its international relations. They involved the semicircular rule (see 421) and the 10-mile rule (see 43) for bays, and the rule for straits leading to inland waters. The latter situation did not arise in the California case. Along the Louisiana coast all islands are so situated in relation to the mainland and to each other as to enclose all waters landward of the islands as inland waters with the result that the islands constitute large segments of the coastline. Mahler v. Norwich and New York Transportation Company*, 35 N.Y. 352 (1866). Also *see* Brief for the United States in Support of Motion for Judgment on Amended Complaint 177, United States v. Louisiana et al., Sup. Ct., No. 11, Original, Oct. Term, 1957. *The openings between the numerous islands along the Louisiana coast constitute channels leading to inland waters and the rule as to bays becomes applicable* (*see* Part 3, 2218 (*c*)). [Emphasis added.]

1962: Shalowitz Discussion of Fringing Islands Along Louisiana's Coast

1621. SEAWARD LIMITS OF INLAND WATER

A. WHERE ISLANDS FRINGE A COAST

When the Chapman line was drawn along the Louisiana coast (see Part I, 731), pursuant to the decision in United States v. Louisiana, 339 U.S. 699 (1950), the principle followed in drawing the baseline was that waters enclosed between the mainland and offlying islands which were so closely grouped that no entrance exceeded 10 nautical miles in width were considered inland waters.

In formulating principles for delimiting the "coast line," as defined in the Submerged Lands Act, an amplification of the above procedure was recommended so that it would be of general application, to wit: "The coast line should not depart from the mainland to embrace offshore islands, except where such islands either *form a portico to the mainland and are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters*, or they form an integral part of a land form." [124] [Emphasis added.]

* * * *

[124] Within the author's knowledge there has neither been proposed nor developed thus far a geometric rule for determining the status (inland waters or open sea) of water areas

between islands and the mainland coast similar to the semicircular rule for bays. It would be difficult to develop such a rule for general application because of the complex of geographical configurations that might be encountered and would not be limited as in the case of bays to a single form of configuration. It has been proposed that the semicircular rule for bays be applied for a determination of the limit of inland waters behind straight baselines (*see* Part 3, 2211 A(*b*) note 17).

[125]Memorandum of Apr. 18, 1961, from the Director, Coast and Geodetic Survey, in reply to letter of Mar. 6, 1961, from the Solicitor General of the United States. The request set forth the problem of giving precise application to the rather general terms of the Supreme Court decision of May 31, 1960, and the decree of Dec. 12, 1960, which established the dividing line between federal and state property rights in the Gulf of Mexico at a distance of 3 geographic miles from the coastlines of Louisiana, Alabama, and Mississippi, and 3 leagues from the coastlines of Texas and Florida, and defined coastline as "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters." The Bureau's advice was sought in formulating principles on which to base the Government's position because "the questions involved [bays, inland waters, islands, ordinary low water, etc.] largely relate to matters within the particular competence of the Coast and Geodetic Survey." The Bureau's memorandum contained recommendations (including commentaries) on the principles to be established in defining "coast line" as it applied to various geographic configurations along the Gulf coast, particularly the Louisiana coast. Some of these recommendations are embodied in the discussion of the Geneva Convention on the Territorial Sea and the Contiguous Zone and the interpretation to be placed on some of the provisions (*see* Part 3, 221).

1962: Shalowitz Discussion of Island Group Status Under the Geneva Convention on the Territorial Sea and the Contiguous Zone

2211. DELIMITATION OF THE TERRITORIAL SEA

D. ISLANDS AND LOW-TIDE ELEVATIONS

b. Groups of Islands

This question of groups of islands cannot be considered as settled. The International Law Commission, while recognizing the importance of the question, was unable to reach a decision because of disagreement on the breadth of the territorial sea and because of a lack of technical information on the subject. It pointed out, however, that the rules with regard to straight baselines may be applicable to groups of islands lying off the coast.

1 *Shalowitz* 228 (1962). Discussion under Part III "Recent Developments in the Law of the Sea," Chapter 2 "United Nations Conferences on the Law of the Sea."

1963: U.S. Brief in United States v. California—Straits Leading to Inland Waters

(e) *Straits leading to inland waters.*—Wherever the United States has insisted on the right of innocent passage through straits, denying them the status of inland waters, the claim has rested on the character of the strait as a passageway between two areas of high seas. No such right is claimed as to a strait leading only to inland waters. Such a strait is treated as a bay. Examples of this have already been discussed, including the straits leading into the Alaskan Archipelago (*supra*, pp. 105-107), straits leading to waters between Cuba and its encircling reefs and keys (*supra*, pp. 103-105), and Chandeleur Sound (*supra*, p. 110; see also, *infra*, pp. 153-155).[105]

[105]The proper application of this principle becomes a matter of some difficulty in situations where several straits lead to the same body of inland water; and a circularity is involved in situations where the "inland" status of that body depends on whether its entrances are to be subject to the ten-mile rule or to three-mile marginal belts. It may be that some of the applications have been unduly liberal—for example, in the case of Chandeleur Sound—but this need not concern us here, for, as we shall show, even accepting those liberal applications as correct, they do not reach the situation in California. See *infra*, pp. 151-155.

Brief for the United States in Answer to California's Exceptions to the Report of the Special Master in *United States v. California*, No. 5, Original (1963), pp. 130-31.

1963: U.S. Brief in United States v. California—10-Mile Island Rule at Chandeleur Sound

California attempts to analogize the Santa Barbara Channel to Chandeleur and Breton Sounds, in Louisiana, which the United States has recognized as inland waters (Brief, 33-34, n. 14; 82; 106-108). For present purposes, it is enough to observe that the widest entrances into Chandeleur and Breton Sounds are six miles, between Breton Island and Bird Island, and slightly less than ten miles, between Ship Island and the northernmost tip of the Chandeleur Islands. See U.S. Coast & Geodetic Survey Chart No. 1115. Thus, our concession as to Chandeleur and Breton Sounds involved no breach of the ten-mile limit. Other aspects of California's analogy are discussed *infra*, pp. 153-155.

Brief for the United States in Answer to California's Exceptions to the Report of the Special Master in *United States v. California*, No. 5, Original (1963), pp. 130-31.

1963: U.S. Brief in United States v. California—10-Mile Rule at Chandeleur Sound Versus Santa Barbara Channel

Finally, California points to the United States' recognition of Chandeleur and Breton Sounds, in Louisiana, as inland waters, and attempts to show that the Santa Barbara Channel is not distinguishable. Brief, 33-34, n. 14, and maps following 34; 82; 106-107. As we have pointed out (*supra*, p. 110), there is no opening into Chandeleur or Breton Sound wider than 10 miles while the western entrance to the Santa Barbara Channel, between Point Conception and Richardson Rock, is about 21 miles. Thus the analogy fails at the outset, unless California is entitled to the benefit of the 24-mile rule. But even apart from this, the two bodies of water are utterly dissimilar. The Santa Barbara Channel connects the high seas of the Pacific Ocean with other waters which we believe, and the Special Master found, are likewise high seas; and it is actually used as a route for shipping not going to or from local ports. Chandeleur and Breton Sounds, on the contrary, lead nowhere; they are simply an enclosed lagoon in a cul-de-sac of the Gulf of Mexico. Moreover, even if international traffic wanted, for some inexplicable reason, to go through the maneuver of making a loop into the sounds at one end and back out again at the other, it could

Brief for the United States in answer to California's Exceptions to the Report of the Special Master in *United States v. California*, No. 5, Original (1963) pp. 153-55.

not do so because there is not sufficient depth.[119] Not only is it not a "useful" route for international traffic, it is not even a feasible one. California is correct in saying (Brief, 107), that depth is not a recognized test of inland waters; but navigability is certainly a primary test of international straits.[120] The determinative distinction is that the Santa Barbara Channel is a used and useful channel for international traffic between areas of high seas, while Chandeleur and Breton Sounds are not.

[119]According to the soundings shown on Coast & Geodetic Survey Chart No. 1270, the depth is in general from 6 to 12 feet, but there is no passage as much as 12 feet deep between the northern and southern ends of the sounds.

[120]As tidewater, Chandeleur and Breton Sounds are in a legal sense "navigable waters," even in those parts that are too shallow for navigation. See *United States* v. *Turner*, 175 F. 2d 644, 647 (C.A. 5), *certiorari denied*, 338 U.S. 851. However, a strait is not subject to an international right of passage unless it is a useful route of navigation in its natural condition. Thus, the *Fisheries Case* held that the Indreleia (a navigational route along the Norwegian coast inside the islands) is not an international strait because its utility depends on navigational aids maintained by Norway. I.C.J. Reports, 1951, p. 116 at 132. The California channels are useful without artificial improvement. See Tr. 323, 330-331.

1963: U.S. Brief in United States v. California—U.S. Position on Straits Leading to Inland Waters off Cuba and Alaska

California refers (Brief, 73-74; 108, n. 62) to American recognition that Cuba's three-mile belt should be measured from its offshore keys and islands, and attempts to show that very long lines can be drawn between some of those islands and the main Cuban coast. The first reference to this subject was in a letter of August 10, 1863, from Secretary of State William H. Seward to Gabriel Tassara, the Spanish Minister, 1 Moore, *Digest of International Law* (1906), 711-712. Spain had argued that she was entitled to more than three miles of territorial water around Cuba because the presence of many offshore reefs and islands within three miles of the Cuban coast made a three-mile belt an inadequate defensive area. Secretary Seward made the obvious reply, that the three-mile belt should be measured from the offshore islands rather than from the shore of Cuba proper. This in itself was enough to answer the Spanish contention, and of course was plainly correct. We have always conceded that every island is entitled to a three-mile belt around it. However, Secretary Seward went on to express the view, based on his examination of maps, that the "line of keys is properly to be regarded as the exterior coast line,

Brief for the United States in Answer to California's Exceptions to the Report of the Special Master in *United States v. California*, No. 5, Original, pp. 103-06.

and that the inland jurisdiction ceases there, while the maritime jurisdiction of Spain begins from the exterior sea front of those keys." Undoubtedly that is true of most of the Cuban keys, especially those closely grouped along the north coast where the principal difficulties with American shipping were arising. Whether Secretary Seward's statement must necessarily be understood as a categorical assertion that *every* islet off the Cuban coast forms part of a single exterior coast line seems doubtful;[50] but even if it is so understood, it is by no means necessary to join them by such long closing lines as California indicates.[51] Of seventeen lines, one exceeds the ten-mile limit by 7 16 miles. So small a concession to a foreign power, in the particular geographical situation there presented, may be dismissed as *de minimis*. Certainly it does not prove a policy of claiming on our own coasts the very long lines suggested by California.[52]

California refers (Brief, 76; 108, n. 62) to the line described by the United States in the Alaska Boundary Arbitration of 1903 as the "coast line" of the Alaska Archipelago, and shows on a map that lines longer than ten miles can be drawn between islands of that group. However, those lines are not the lines described by the United States in that arbitration.[53]

None of the closing lines actually described needs to exceed ten miles in length, and the United States repeatedly emphasized that none was to be drawn so as to be more than ten miles:

When "measured in a straight line from headland to headland" at their entrances, Chatham Strait, Cross Sound, Sumner Strait and Clarence Strait, by which this exterior coast line is pierced, measure less than ten miles. That fact, according to the authorities quoted in the British Counter Case, pp. 24-28, places them within the category of territorial waters. [5 *Proceedings of the Alaskan Boundary Tribunal*, S. Doc. No. 162, 58th Cong., 2d Sess. (Cong. Doc. Ser. No. 4603), Pt. I, Argument of the United States, pp. 15-16.]

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[80]Secretary of State Hamilton Fish, writing on May 18, 1869, to Secretary of the Navy Adolph E. Borie, referred only to the three-mile belt around each key, without suggesting that the line of keys marked the limit of inland waters (1 Moore, *Digest of International Law* (1906) 713):

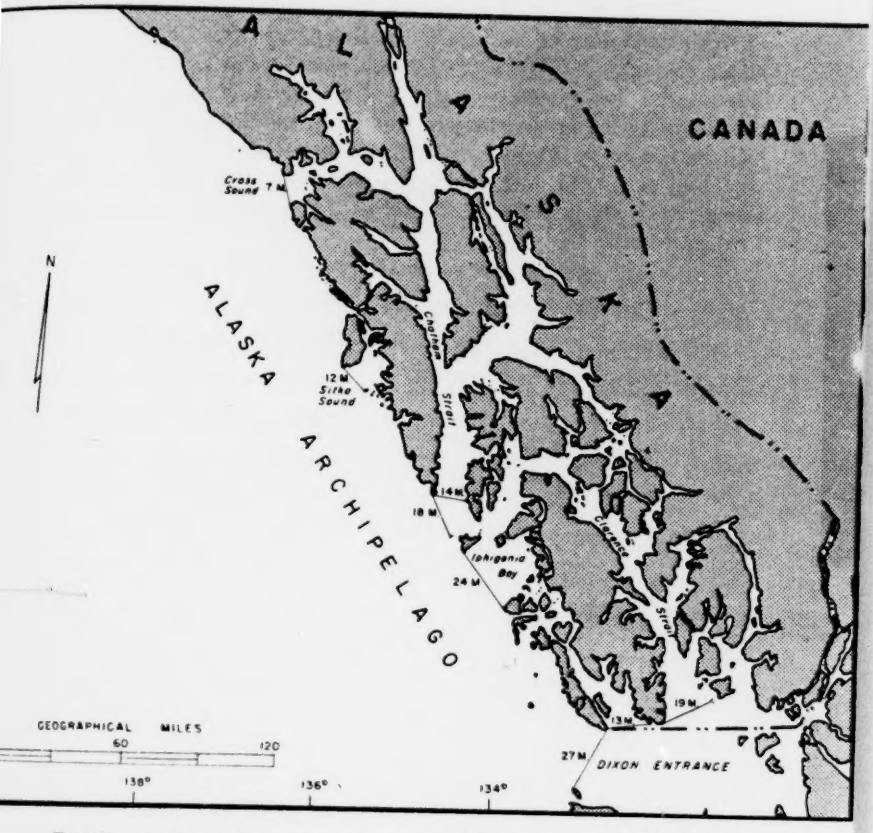
"The maritime jurisdiction of Spain may be acknowledged to extend not only to a marine league beyond the coast of Cuba itself, but also to the same distance from the coast line of the several islets or keys with which Cuba itself is surrounded. Any acts of Spanish authority within that line can not be called into question, provided they shall not be at variance with law or treaties."

[81]According to Naval Hydrographic Charts Nos. 2617, 2618 and 2620, the Gulf of Batabano, for which California shows closing lines of 23 miles at the east end 59 miles at the west (Brief opposite p. 74), can be enclosed by the following lines: Punta Oriental to Cayo Piedras, 7 miles; thence to an unnamed sandy islet at about 21°48′30″N., 81°12′15″ W., 10 miles; thence to Cayos de Dios, 10 miles; thence to Cayo Ingles, 4½ miles; thence to Cayo Largo, 7 miles; thence to Cayo Estofa, 2 miles; thence to Cayo Rosario, 7 miles; thence to Cayo Cantiles 1½ miles; thence to Cayo Avalos, 3 miles; thence to Cayos Aguardientas, 2 miles; thence to Cayo Campos, ½ mile; thence to Cayo Hicacos, ½ mile; thence to Cayo Matias, 2 miles; thence to the Isle of Pines, 4 miles; thence to Cayos los Indios, 5 miles; thence to Cayos de San Felipe, 8 miles; thence to Punta Santo Domingo, 10 7/16 miles.

[82]The question of how maritime limits should be drawn

where there are offshore islands is discussed *infra*, pp. 119-140. The present discussion is not intended to deal with that question beyond showing that the United States has not exceeded the ten-mile rule in that connection.

[83]The line claimed by the United States was described as follows (4 *Proceedings of the Alaskan Boundary Tribunal*, S.



Portion of a map of Alaska, *United States v. California*, No. 5, Original, *Brief in Support of Exceptions of the State of California to the Report of the Special Master*, dated October 14, 1952, Pursuant to Court Order of December 2, 1963, opposite p. 76.

Doc. No. 162, 58th Cong., 2d Sess. (Cong. Doc. Ser. No. 4602), Pt. I, Counter Case of the United States, p. 32):

"In the present instance the political or legal coast line drawn southward from Cape Spencer would cross to the northwestern shore of Chichagof Island and follow down the western side of that island and of Baranof Island to Cape Ommaney; at this point it would turn northward for a short distance and then cross Chatham Strait to the western shore of Kuiu Island; thence again turning southward along that shore and along the outlying islets west of Prince of Wales Island, the line would round Cape Muzon and proceed eastward to Cape Chacon; thence following northward along the eastern shore of Prince of Wales Island to Clarence Strait it would cross the latter at its entrance and proceed southeastward to the parallel of 54°40′ at the point where it enters Portland Canal."

1965: United States v. California, Supreme Court Decision

California asserts that the Santa Barbara Channel may be considered a "fictitious bay" because the openings at both ends of the channel and between the islands are each less than 24 miles.[38] The United States argues that the channel is no bay at all; that it is a strait which serves as a useful route of communication between two areas of open sea and as such may not be classified as inland waters.[39]

By way of analogy California directs our attention to the Breton and Chandleur Sounds off Louisiana which the United States claims as inland waters, *United States* v. *Louisiana*, 363 U. S. 1, 66-67, n.108. Each of these analogies only serves to point up the validity of the United States' argument that the Santa Barbara Channel should not be treated as a bay. The Breton Sound is a *cul de sac*. The Chandleur Sound, if considered separately from the Breton Sound which it joins, leads only to the Breton Sound. Neither is used as a route of passage between two areas of open sea. In fact both are so shallow as to not be readily navigable.[40]

[38]The United States asserts that "international law recognizes no principle of 'fictiticus bays.' " We find it unnecessary to decide that question. . . .

[39]The openings at the ends of the Santa Barbara Channel are 11 miles and 21 miles.

United States v. California, 381 U.S. 139, 170-71 (1965).

[38]See Letter from Acting Secretary of State Webb to Attorney General McGrath, November 13, 1951, Senate Hearings 460. See also Senate Hearings 1084-1085 (remarks of Jack B. Tate).

[40]The depth in general ranges between 6 and 12 feet according to Coast and Geodetic Survey Chart No. 1270, but there is no passage as much as 12 feet deep connecting the ends of the sound. The sounds are "navigable waters" in the legal sense even in the parts too shallow for navigation. See *United States* v. *Turner*, 175 F. 2d 644, 647, cert. denied, 338 U.S. 851.

1966: United States v. California, Supplemental Decree

6. Roadsteads, *waters between islands, and waters between islands and the mainland are not per se inland waters.* [Emphasis added.]

United States v. California, 382 U.S. 448, 451 (1966).

1968: United States Brief in United States v. Louisiana

12. *Chandeleur and Breton Sounds.*—Under the Convention on the Territorial Sea and the Contiguous Zone, waters between the mainland and coastal islands do not have the status of inland waters unless the coastal nation elects to enclose them by straight baselines under Article 4. Prior to that Convention there was no international consensus on the subject; but *the United States had taken the position that such waters were inland waters at least in some circumstances. In accordance with that position, we have heretofore treated Chandeleur and Breton Sounds as inland waters in this case and its predecessor, United States v. Louisiana, No. 13, Original, October Term, 1948; No. 12, Original, October Terms, 1949-1950; No. 7; Original, October Terms, 1951-1960.*

In 1950 federal officials described the line, commonly known as the "Chapman Line," representing the federal position as to the proper coast line of Louisiana, which drew closing lines across the entrance to Breton Sound from Breton Island, by way of Bird Island, to the northern headland of Grand Bay, and

Motion by the United States for Entry of a Supplemental Decree as to the State of Louisiana (No. 2), Proposed Supplemental Decree and Memorandum in Support of the Motion of the United States and in Opposition to the Motion of the State of Louisiana, filed January 1968 in *United States v. Louisiana, et al.*, No. 9, Original, pp. 78-80.

across the entrance to Chandeleur Sound from the northern tip of the northernmost of the Chandeleur Islands to the western tip of the westernmost of the Ship Islands. On March 16, 1951, the United States asked Louisiana for an accounting on the basis of that line, under the decree of December 11, 1950, 340 U.S. 899. That line was used also as the baseline of the three-mile belt, called "Zone 1," which Louisiana is allowed to administer without impoundment of proceeds under the Interim Agreement of October 12, 1956. See Agreement Between United States of America and State of Louisiana Pursuant to Section 7 of the Outer Continental Shelf Lands Act and Act 38 of the Louisiana Legislature of 1956, paragraphs 2(a) and (6), and Exhibit "A" thereto, filed October 12, 1956, pursuant to the order of June 11, 1956, 351 U.S. 978, and Amended Exhibit "A," January 28, 1957, filed June 11, 1957. On the same basis we conceded in 1958 that the waters between the mainland and islands belonging to Louisiana under its Act of Admission were in fact sufficiently enclosed to constitute inland waters under the principles then being followed by the United States. See *United States* v. *Louisiana*, 363 U.S. 1, 67, fn. 108. Paragraph 3(d) of the supplemental decree of December 13, 1965, 382 U.S. 288, 292, entered on motion of the United States without objection by Louisiana, awarded to Louisiana certain submerged land in the entrance to Breton Sound on the same basis (but assuming a closing line from Breton Island directly to the eastern headland of Main Pass, seaward

of the original Chapman Line, in recognition of substantial intervening accretion at Main Pass).

We think that there would be much justification for asking at this time to be relieved of a concession, at variance with the Convention on the Territorial Sea and the Contiguous Zone, made four months before that Convention was signed by the United States, more than six years before it entered into force, and seven years before this Court announced that the grant made by the Submerged Lands Act of May 22, 1953, was to be measured by the rules of the Convention *rather than by the principles followed by the United States at the time the Act was passed.* However, we do not ask for such relief because we think it would not be in the public interest, at this late date, to upset a fundamental assumption that has guided the conduct of both parties and their lessees in a large area over a long period of time. We do point out, however, that since Louisiana's right to these sounds as inland waters rests solely on the basis of our adherence to our past concession, and not on any legal principle, there is no basis on which Louisiana can be allowed closing lines farther seaward than the concession warrants. [Emphasis added.]

1974: United States v. Florida, No. 52, Original, Report of Albert B. Maris, Special Master

I do not think that this conclusion need be reached with respect to the most easterly portion of this area, however, namely, the area between the mainland on the northwest and the upper Florida Keys on the southeast which lies east of a closing line running southwesterly from East Cape of Cape Sable to Knight Key in the Florida Keys, a distance of approximately 24 geographical miles. This area comprises for the most part very shallow water which is not readily navigable and nearly all of which is dotted with small islands and low-tide elevations. I find that this area is sufficiently enclosed by the mainland and the upper Florida Keys, which constitute realistically an extension of the mainland, to be regarded as a bay which constitutes inland waters of the State within the test applied in *United States v. Louisiana*, 1960, 363 U.S. 1, 66-67, fn. 108, and *United States v. Louisiana*, 1969, 394 U.S. 11, 60-66, and discussed in *United States v. California*, 1965, 381 U.S. 139, 171. Moreover, the character of this area as inland waters of the State of Florida appears to be conceded by the United States. It is this area which I designate in this report as Florida Bay. But the claim of the State to the waters of the Gulf of Mexico to the west of this area as a juridical bay must, in my opinion, be rejected.

Report of Albert B. Maris, Special Master, in *United States v. Florida*, No. 52, Original, pp. 38-39. (See Figure at p. 19, *supra*, of this appendix.)

APPENDIX B
SYLLABUS OF FINDINGS

Pages

Louisiana's Historic Claims

East Bay, Findings 1-7 129-172
Other Mississippi Delta Bays, Findings 8-13 172-184
Caillou Bay, Findings 14-19 184-210
Shell Keys, Finding 20 210-220

Juridical/Geomorphic (Article 7) Claims

South Pass to Southwest Pass: East Bay, Findings 21-36 220-254
From Dead Woman Pass to North Pass (Bucket Bend Bay) 254-260
From Pass A Loutre to Southeast Pass, Including Blind Bay 260-264
From Southeast Pass to South Pass, Including Garden Island and Redfish Bays 264-271
South Pass 271-276
Southwest Pass to Belle Pass: Ascension Bay 276-283
West Bay to Pass Tante Phine 283-285
Caillou Bay 285-308
Atchafalaya Bay 308-312

No. 9, ORIGINAL

In the
Supreme Court of the United States

OCTOBER TERM, 1973

UNITED STATES OF AMERICA,

Plaintiff,

v.

STATE OF LOUISIANA, ET AL.,

Defendants.

MOTION TO CLARIFY, AMEND AND SUPPLEMENT FINDINGS OF FACT AND CONCLUSIONS OF LAW IN THE TENTATIVE DRAFT OF THE PROPOSED REPORT OF THE SPECIAL MASTER

The State of Louisiana, in response to the invitation of the Special Master in his letter of February 21, 1974, files this motion to clarify, amend and supplement the findings of fact and conclusions of law contained in the tentative draft of the Special Master as to a report to be filed with the Court, and respectfully states:

LOUISIANA'S HISTORIC CLAIMS

East Bay

1. There is no dispute and the evidence proves that at least until 1918, East Bay qualified as a juri-

dical bay under principles then recognized by the United States in its international relations.

A. East Bay was a juridical bay under principles advocated by the United States at least until 1918, as sustained by admissions of the United States in its *Suggested Findings of Fact and Conclusions of Law* on historic waters filed with the Special Master by cover letter dated December 3, 1973, which read:

> "Before 1900, East Bay appears to have had such a configuration that its entrance did not exceed 10 miles in width. Since at least 1918, the entrance of the Bay has been more than 10 miles wide. La.. Ex. 23." (U.S. suggested finding #8.)
>
> "Nevertheless, if one applies the 10-mile closing rule until 1958, and the Convention on the Territorial Sea and the Contiguous Zone thereafter, East Bay, if once a true inland bay, ceased to be a juridical bay ever since at least 1918. See the Chapman Line of 1950 which did not enclose East Bay." (Portion of U.S. suggested finding #9.)

B. The international and domestic principles of juridical bay delimitation recognized by the United States at the time during which East Bay, by admission, had the character of a juridical bay are summarized in the Award of the Tribunal in the *North Atlantic Coast Fisheries Arbitration*, decided September 7, 1910, and

incorporated into the subsequent treaty signed by the United States on July 20, 1912. (Scott, *The Hague Court Reports* (1916) pp. 142-225, see La. Exh. 283(10).)

(1) In case of bays the three marine miles are to be measured from a straight line drawn across the body of water at the place where it ceases to have the configuration and characteristics of a bay. (*Scott* at 224.)

On this point the tribunal commented:

> This interest [of the territorial sovereign] varies, speaking generally, in proportion to the penetration inland of the bay; but as no principle of international law recognizes any specified relation between the concavity of the bay and the requirements for control by the territorial sovereignty, this tribunal is unable to qualify by the application of any new principle its interpretation of the treaty of 1818. . . . (*Scott* at 183-84.)

(2) In every bay not hereinafter specifically provided for, the limits of exclusion shall be drawn three miles seaward from a straight line across the bay in the part nearest the entrance at the first point where the width does not exceed ten miles. (*Scott* at 224.)

Bays for which the limits of exclusion were specifically provided ranged in width from under ten geographic miles to over 17 geo-

graphic miles (Egmont Bay) at their entrances.

C. Prior to 1918, East Bay constituted a pronounced indentation of Louisiana's coast, having a mouth less than 10 geographic miles wide and exhibiting the configuration and characteristics of a bay. The configuration and characteristics are reflected by its pronounced penetration in proportion to the width of its mouth, as demonstrated by satisfaction of the semicircle test. (See tabular summary of uncontroverted data below from La. Exh. 23A and Figure 1; La. Exhs. 229, 230, 238, 241, and 240.)

Edition	Chart	Closing Line Length (Na.Mi.)	Bay Area Acres	Hypothetical Semi-circle (Ac)	Difference Acres
1839	Talcott	8.72	26,150	25,323	+827
1873	194	7.79	31,047	20,198	+10,849
1901	194	8.58	31,588	24,502	+7,086

2. From 1918 until the inception of litigation claims to East Bay in 1948, and after, East Bay qualified as a juridical bay under legal principles advocated by the United States in its international relations.

A. East Bay had a more bay-like configuration and characteristics after 1918 than did Egmont Bay, on the coast of Prince Edward Island, which was held to be a juridical bay in the *North Atlantic Coast Fisheries Arbitration*. Figure 2 compares the configuration of

Egmont Bay as delimited in the Award of the Tribunal with that of East Bay (1918-1955) as claimed by Louisiana. (La. Exh. 23A; Exh. 283(10)—*Scott* at 224; *Louisiana Reply Brief*, Fig. 133A.)

B. The U.S. Treasury Department defined the territorial waters* of the United States in 1923 as follows:

> Sec. 1. The territorial waters of the United States comprise all waters over which the United States claims and exercises dominion and control as a sovereign power, including ports, harbors, bays and other enclosed arms of the sea along the coast of the United States and of the island and other possessions thereof, together with a marginal belt of the sea extending from low water mark outward a marine league, or three geographical miles, the seaward boundary thereof following a coast of land belonging to the United States; *bays, such as the Chesapeake Bay and the Delaware Bay, which except at their entrance, are so surrounded by the lands of the United States as to be reasonably regarded as geographically a part thereof, regardless of the distance between the opening headlands.* . . . (T.D.

*"Territorial waters" as used in this and subsequent legislative acts of the United States [Findings 2.C and 2.D] include both marginal sea and inland waters. La. Exh. 283(2), pp. 249-250, 262.

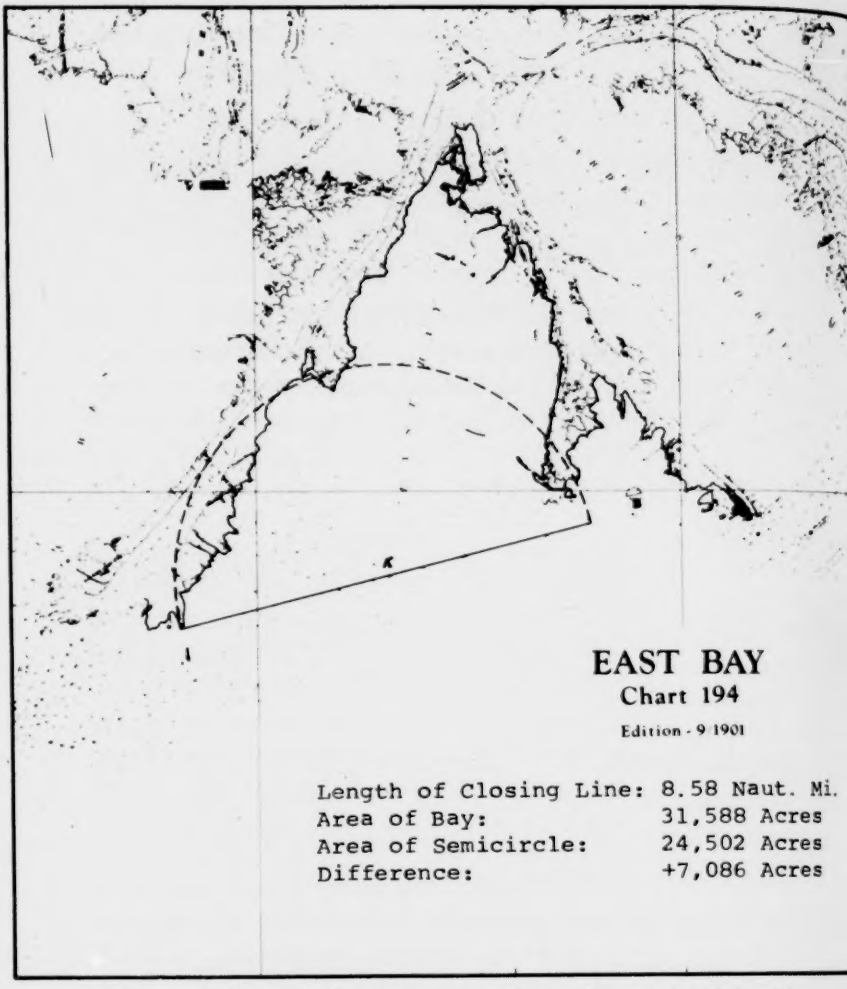


Figure 1. Juridical bay closure for East Bay on 9/1901 edition of Chart 194 (from La. Exh. 23A) showing satisfaction of the semicircle test with a bay closure less than 10 geographic miles long. This configuration prevailed on nautical charts until 1918. (La. Exhs. 22 and 23A.)

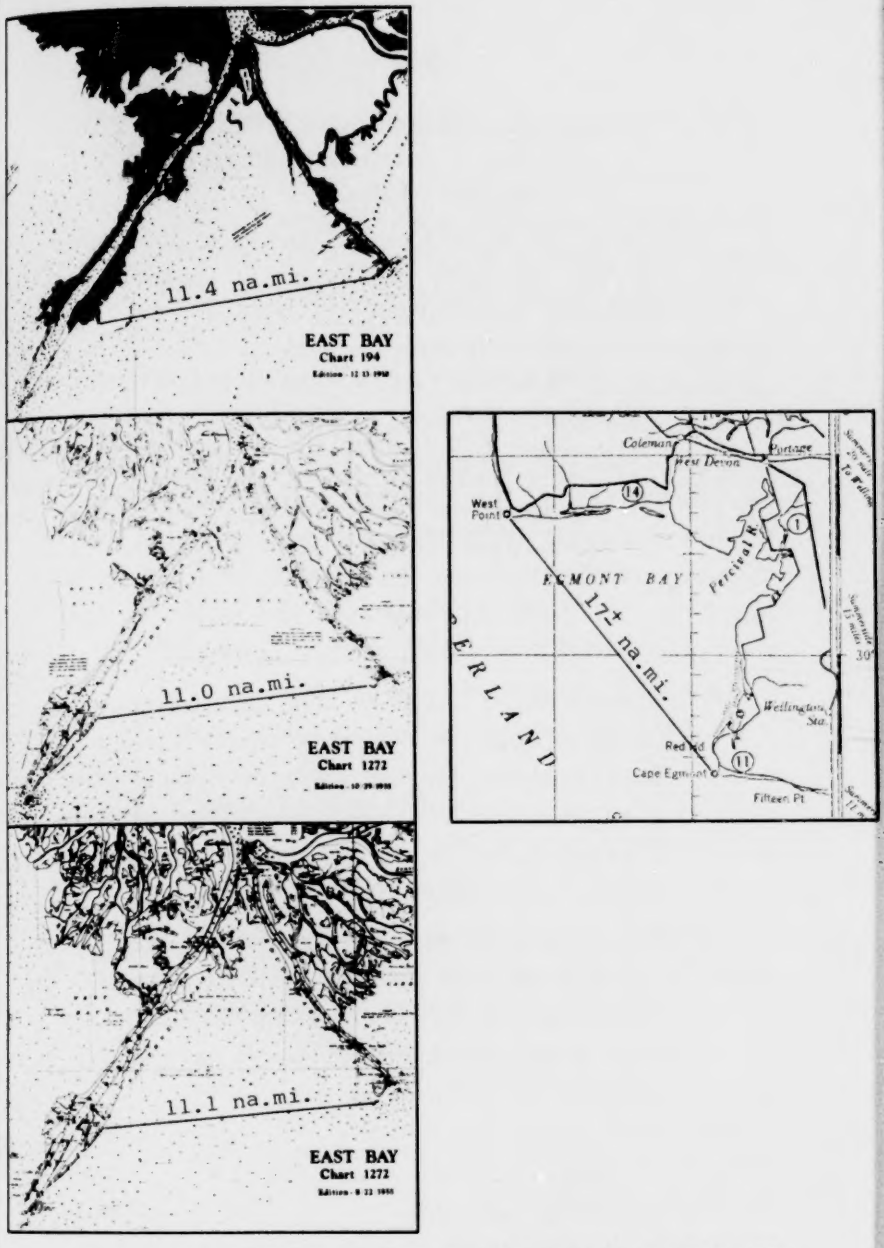


Figure 2. Comparison of East Bay from 1918 to 1955 with Egmont Bay. (See *Louisiana Reply Brief*, Figure 133A, for direct comparison of Egmont Bay with East Bay.)

Bulletin 3484 (June 2, 1923), La. Exh. 150, Tab 3, Admission No. 1, Exhibit 1 (c), emphasis added.)

C. In an order to the Coast Guard Fleet published on May 20, 1925, the Treasury Department delimited juridical bays as follows:

> "Where bays and estuaries are involved, which are not more than 20 miles in width —head-land to head-land—the 'coast' is determined by a straight line drawn from head-land to head-land and tangent to them. REGINA vs. CUNNINGHAM, Bell Crown Cases 72; DIRECT U.S. CABLE CO. vs. ANGLO-AM TEL. CO. (in the House of Lords) 2 App. Cases 349."

(Letter dated June 4, 1929, from Seymour Lowman, Assistant Secretary of the Treasury Department to the Secretary of State in response to a request concerning delimitation of U.S. territorial waters from the Norwegian Legation, La. Exh. 172.)

D. The United States similarly defined permissible bay closures for delimitation of the territorial sea of the United States for enforcement of the National Prohibition Act of 1927 (41 Stat. 305):

> . . .bays, such as Chesapeake Bay and Delaware Bay, which, at their entrances, are so surrounded by the lands of the United States as to be reasonably regarded as geographically a part thereof, regardless

of the distance between the opening headlands. . . .

(La. Exh. 283(2), p. 250—an excerpt from Section 2201, Regulation 2, which was a revision of Internal Revenue Regulations No. 60.)

E. The Boggs's reduced area formula for ascertaining the juridical character of a waterbody, although proposed by the United States delegation to the 1930 Hague Conference on the Codification of International Law, has never received international recognition, either at the conference or in later codification attempts. However, the basic principle of the Boggs formula, the semicircle test of Article 7(3) of the Territorial Sea Convention, has received recognition. (*United States v. California*, (1965), 381 U.S. 139, 164, n. 27; La. Exh. 178, p. 41; La. Exh. 283(4), p. 151-152; U.S. Exhs. 74 and 93; 1 *Shalowitz* 36-40 and pp. 341-42 of Appendix C.)

F. The United States supported the 10-mile closing line for bays and the 10-mile fallback principle (Basis for Discussion No. 7) at the 1930 Hague Conference. However, international agreement on a limit for bay mouth size and fallback lines was not reached until adoption of the Convention on the Territorial Sea and the Contiguous Zone, which the United States Supreme Court has retroactively applied. *United States v. California*,

381 U.S. 139, 163-165 (1965). (U.S. Exh. 74, p. 198.)

G. The semicircle method generally, and not specifically the reduced area method as proposed by Boggs in 1930, has been used by various agencies of the Federal government at least since 1930, according to Aaron L. Shalowitz, Special Assistant to the Director of the U.S.C. & G.S. (1 *Shalowitz* 40-41; La. Exh. 178; also, see Finding 2.H, *infra.*)

H. The Census Bureau's delimitation of the outer limits of the United States in the official Sixteenth Census of 1940 represents a published attempt by an agency of the Federal government to delimit internal waters of the United States. This delimitation was based upon the principles described below (excerpted from La. Exh. 52(1), *Measurement of Geographic Area*), which were taken from the State Department's posture in international relations. No disclaimer of the effects of this delimitation is found in this officially published (Department of Commerce) document.

> A solution for the problem of setting outer limits for the United States was obtained by special adaptations, pertaining to embayments and islands, of the excellent principles established by S. W. Boggs, Geographer of the Department of State, in delimiting the territorial waters

of the United States.[94] These adaptations of Boggs' principles resulted in the following rules for delimiting coastal and Great Lakes water,[95] and thereby, in part, for setting the outer water limits of the United States (fig. 8): (1) where the coast line is regular it shall be followed directly unless there are off-shore islands within ten nautical miles;[96] (2) where embayments occur having headlands of less than ten and more than one nautical mile in width, a straight line connecting the headlands shall set the limits;[97] however, (3) the coast line shall be followed if the indentation of the embayment is so shallow that its water area is less than the area of a semicircle drawn using the said straight line as a diameter;[98] and (4) two or more islands less than ten and more than one nautical mile from shore shall be connected by a straight line or lines, and other straight lines shall be drawn to the shore from the nearest point on each end island.[99]

NOTE: East Bay is delimited as internal waters in this document by a line from the tip of Southwest Pass to the South Pass spit (La.

[94]Boggs, S.W., "Delimitation of the Territorial Sea, The Method of Delimitation Proposed by the Delegation of the United States at the Hague Conference for the Codification of International Law," *American Journal of International Law*, Vol. 24 (July, 1930), 541-555.

[95]Termed "State water" and not subdivided among adjoining counties or minor civil divisions.

[96-99]Footnotes omitted.

Exh. 52(1), p. 45, reproduced *infra* as Figure 8 at Finding 6.I.).

I. The international and domestic principles of juridical bay delimitation recognized prior to 1951 by the United States are outlined in a letter from James E. Webb of the State Department to J. Howard McGrath, Attorney General, dated November 13, 1951.

> (c) The determination of the base line in the case of a coast presenting deep indentations such as bays, gulfs, or estuaries has frequently given rise to controversies. The practice of states, nevertheless, indicates substantial agreement *with respect to bays, gulfs or estuaries no more than 10 miles wide: the base line of territorial waters is a straight line drawn across the opening of such indentations, or where such opening exceeds 10 miles in width at the first point therein where their width, does not exceed 10 miles.* (See Article 2 of the Convention between Great Britain, Belgium, Denmark, France, Germany and the Netherlands, for regulating the Police of the North Sea Fisheries, signed at The Hague, May 6, 1882, 73 *Foreign and British State Papers*, 39, 41; The North Atlantic Coast Fisheries Arbitration between the United States and Great Britain of September 7, 1910; *U.S. Foreign Rel.*, 1910 at 566; and the Research in International Law of the Har-

vard Law School, 23 American Journal of International Law, SS, 266.)

Subject to the special case of historical bays, *the United States supported the 10 mile rule at the Conference of 1930* (*Acts of Conference*, 197-199) and the Second Sub-Committee adopted the principle on which the United States relied (*Acts of Conference*, 217-218). It was understood by most delegations that, as a corollary to the adoption of this principle, a system would be evolved to assure that slight indentations would not be treated as bays (*Acts of Conference*, 218). The United States proposed a method to determine whether a particular indentation of the coast should be regarded as a bay to which the 10 mile rule would apply (*Acts of Conference*, 197-199.) *The Second Sub-Committee set forth the American proposal and a compromise proposal offered by the French delegation in its report, but gave no opinion regarding these systems (Acts of Conference*, 218-219). 1 *Shalowitz* 355; U.S. Exh. 93; emphasis added.)

It is apparent from the introductory sentences of section (C) of the letter that there was no concrete international law restricting the limit to 10 miles.

J. In the *Anglo-Norwegian Fisheries Case* decision dated December 10, 1951, the Interna-

tional Court of Justice rejected a contention that closing lines for bays or islands was limited to 10 miles. Thereafter, the United States referred to the 10-mile limit, which it had formally contended to be international law, as a "so-called ten-mile rule for bays" (see entire quote, *infra*, this finding). While advocating legislative adoption of a 10-mile limit for bays in the United Nations, after 1951 and prior to the 1958 Convention, the United States recognized that the ICJ had rejected the "so-called ten-mile rule for bays", and thereafter the United States honored greater bay limits, specifically the 24-mile limit after its adoption. These facts are evidenced by U.S. recognition of the Convention (as to honoring the Convention rule) and in a letter from Secretary of State Dean Rusk to Attorney General Robert F. Kennedy, dated January 15, 1963.

> Prior to the decision of the International Court of Justice in the *Anglo-Norwegian Fisheries* case rendered on December 10, 1951 the United States, as indicated above, followed the so-called ten-mile rule for bays, i.e., that under international law the closing line of bays could not exceed that limit. In a note verbale to the United Nations dated March 12, 1956, the United States took exception to a twenty-five mile proposal in the Interna-

> tional Law Commission's 1955 draft code on the law of the sea and advocated instead maintaining the ten-mile rule for bays. Thus, during the 1951-1954 period, the United States either supported the 10-mile rule as international law or after the rejection of that rule by the International Court of Justice advocated its adoption by the United Nations. (U.S. Exh. 102.)

This finding is further substantiated by the Federal government's observations in suggested finding #9 of its *Suggested Findings of Fact and Conclusion of Law* concerning historic claims, p. 6.

> The evidence does not indicate that the United States adhered to a 10-mile closing rule before 1930, or that such a rule was settled in international law even as late as 1953. See *United States v. California*, 381 U.S. 139, 163-164; *Fisheries Case (United Kingdom v. Norway)*, I.C.J. Reports (1951) 116, 131.

K. Findings 1.B through 2.J above indicate that the United States' posture on juridical bay delimitation prior to the inception of the lawsuit in 1948 included the following five points:

(1) Bay closures were permissible regardless of distance between headlands, provided that the waterbodies were sufficiently

surrounded by the land as to be geographically considered a part thereof.

(2) Waterbodies less than 20 miles in width could be closed by baselines from headland to headland.

(3) As a minimum, a 10-mile bay closing line was permissible, and indentations that exceeded that limit could be delimited by a line at the first point within the bay which did not exceed 10 miles.

(4) In applying the above distance rules or for determining sufficiency of enclosure (in 1 above), slight indentations of the coast should be eliminated by application of the semicircle test.

(5) Waters landward of the baseline thus delimited were inland waters.

L. Under principles recognized by the United States prior to the inception of this lawsuit, East Bay was a geographically landlocked indentation, as evidenced by satisfaction of the semicircle test, with a mouth considerably less than 20 miles wide, and accordingly constituted a juridical bay as delimited on La. Exh. 23A (overlays for 1918 to 1956 editions of Chart 194/1272). Tabular data below (from La. Exh. 23A) is uncontroverted by the federal government.

Edition	Chart	Closing Line Length (Na.Mi.)	Bay Area Acres	Hypothetical Semi-circle (Ac)	Difference Acres
1918	194	11.41	45,229	43,420	+1,809
1924	194	11.43	45,515	43,503	+2,012
1925(2)	1272	11.35	45,576	42,921	+2,655
1925(10)	1272	11.44	45,617	43,587	+2,030
1933	1272	11.22	44,332	41,931	+2,401
1934	1272	10.97	44,627	40,067	+4,560
1935	1272	11.00	41,434	40,307	+1,127
1944	1272	11.23	43,077	42,013	+1,064
1955	1272	11.07	42,189	40,872	+1,317

M. Should Findings 2.K.1 and 2.K.2 and 2.L be answered negatively, a 10-mile fallback line (under Finding 2.K.3) could be positioned within East Bay slightly landward from the closures indicated on La. Exh. 23A, because the bay met all requirements other than the 10-mile distance limitation. See Figure 3, *infra*.

3. Changes in the geographic configuration of East Bay and resulting changes in the juridical extent of that waterbody have resulted primarily from artificial modifications to the navigable channels bounding the bay by or under the direction of the U.S. Corps of Engineers.

A. Jettying of South Pass by James B. Eads in in 1875-78 artificially extended the mouth of that landform seaward over one geographic

mile to the southeast. See Figure 4, Area A. (La. Exh. 10, p. 67; La. Exh. 23A, 1901 edition; La. Exh. 177; testimony of Dr. Morgan, tr. 401-03.)

B. Grand Bayou, the natural levee of which constituted the eastern seaward periphery of East Bay in the 1800s and early 1900s, was closed by dams in 1876-1878 in conjunction with South Pass jetty construction. See Figure 4, Area B. (La. Exhs. 177 and 23A; Dr. Morgan, tr. 410.*)

C. Jettying at Southwest Pass, begun by the U.S. Corps of Engineers in 1902 and essentially completed in 1908, extended the mouth of that pass in a southwesterly direction more than three geographic miles. See Figure 4, Area C. (La. Exh. 10, p. 61; La. Exh. 23A, 1918 edition [also La. Exh. 159]; La. Exh. 170; Dr. Morgan, tr. 405.)

D. Numerous small channels entering East Bay from Southwest Pass were dammed in conjunction with the jettying project at that pass. (La. Exhs. 170, 272, 275, 273; Dr. Morgan, tr. 405-06, 417-18 and 6320.)

E. By the eary 1900s, sufficient accretion had occured at the South Pass western jetty to extend the natural levee landform to the end

*References to persons' testimony found in the transcript will be hereinafter cited in the form of "Dr. Morgan, tr. 410."

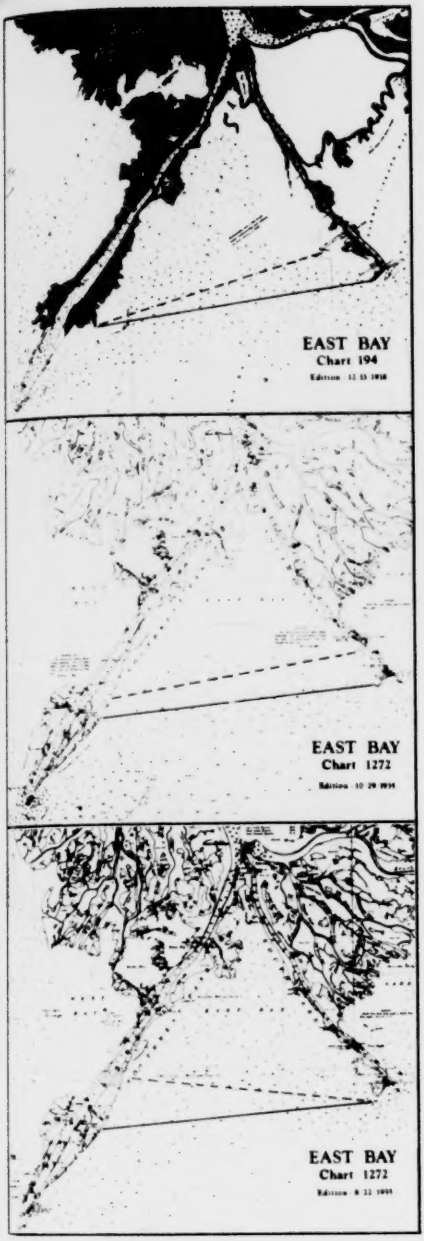


CHART 194 - 12/13/1918
Closing line = 11.41 naut. mi.
Bay area = 45,229 acres
Semicircle area = 43,420 acres
Difference = +1,809 acres

CHART 1272 - 10/29/1935
Closing line = 11.00 naut. mi.
Bay area = 41,434 acres
Semicircle ares = 40,307 acres
Difference = +1,127 acres

CHART 1272 - 8/22/1955
Closing line = 11.07 naut. mi.
Bay area = 42,189 acres
Semicircle area = 40,872 acres
Difference = +1,317 acres

Figure 3. Juridical extent of East Bay from 1918 until 1956 showing closures (solid) consistent with former domestic law (Finding 2.K.1, 2, & 4) and the Convention; also 10-mile fallback closures (dashed) unquestionably permitted in former domestic relations (Finding 2.K.3).

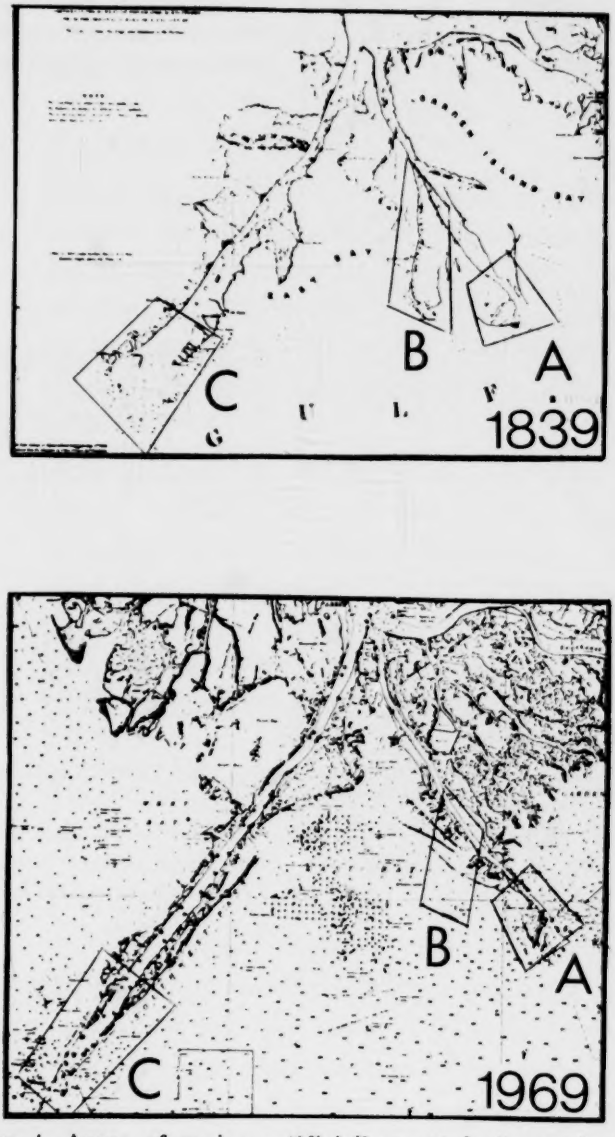


Figure 4. Areas of major artificially caused change in the configuration of East Bay.

of the jetty and to build a small westward trending sand spit at the terminus. (La. Exh. 6, p. 14, Figure 5 [See Figure 23 at Finding 25.A *infra* for reproduction]; La. Exh. 159.)

F. By 1918, the Grand Bayou landform had deteriorated to such an extent that only small levee remnants remained, thereby producing the expanded East Bay configuration. (La. Exh. 159; Dr. Morgan, tr. 410.)

G. Portions of East Bay claimed by the United States in this lawsuit as high seas over which neither government has territorial jurisdiction were formerly land above the high water datum and were patented and issued to private individuals in conformance with U.S. statutes. (La. Exhs. 93 and 94; *Louisiana Brief*, Vol. II, Part 1, Figure H-3 following page 84.)

H. The effect of jetty construction at both passes upon the juridical bay character of East Bay was to greatly extend the distance between outermost points on the headland landforms (closing line length) without enclosing a proportionately greater water area. Hence, the bay fails to meet semicircle test requirements at the outermost (jetty) points (if such points are found to be permissible "natural entrance points") after jetty construction. (La. Exh. 23A, compare pre-1918 and post-1918 editions.)

I. As a direct result of closing the small bayous opening into East Bay along Southwest Pass, the western natural entrance point of East Bay (as delimited on La. Exh. 23A) has significantly retreated, concurrently lengthening the closing line of the bay. See Figure 5 below. (La. Exh. 23A.)

J. Beginning in the 1930s, the Corps of Engineers cut channels through the western natural levee of South Pass, which had become quite narrow by that time, causing sedimentation along that landform. See Figure 6. This artificially created land in the bay reached its maximum extent at the time of the 1959 low-water survey and has been significant in reducing the bay area for semicircle test calculations. (La. Exh. 23A; La. Exhs. 328 and 329; Dr. Morgan, tr. 6324.)

4. The geographic and economic characteristics of

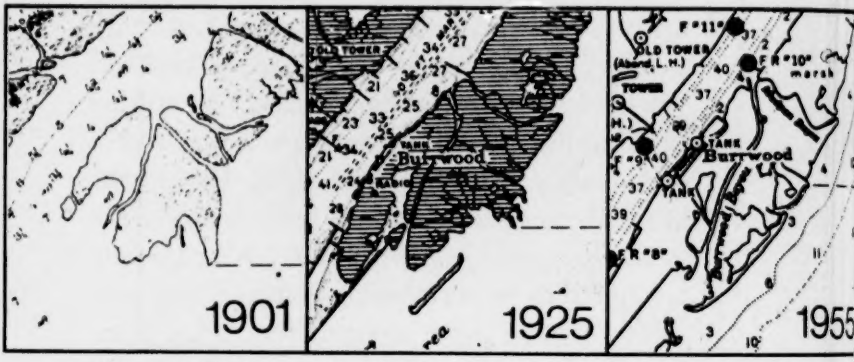


Figure 5. History of Southwest Pass headland landform morphology: 1901 to 1956 (from base maps in La. Exh. 23-A).

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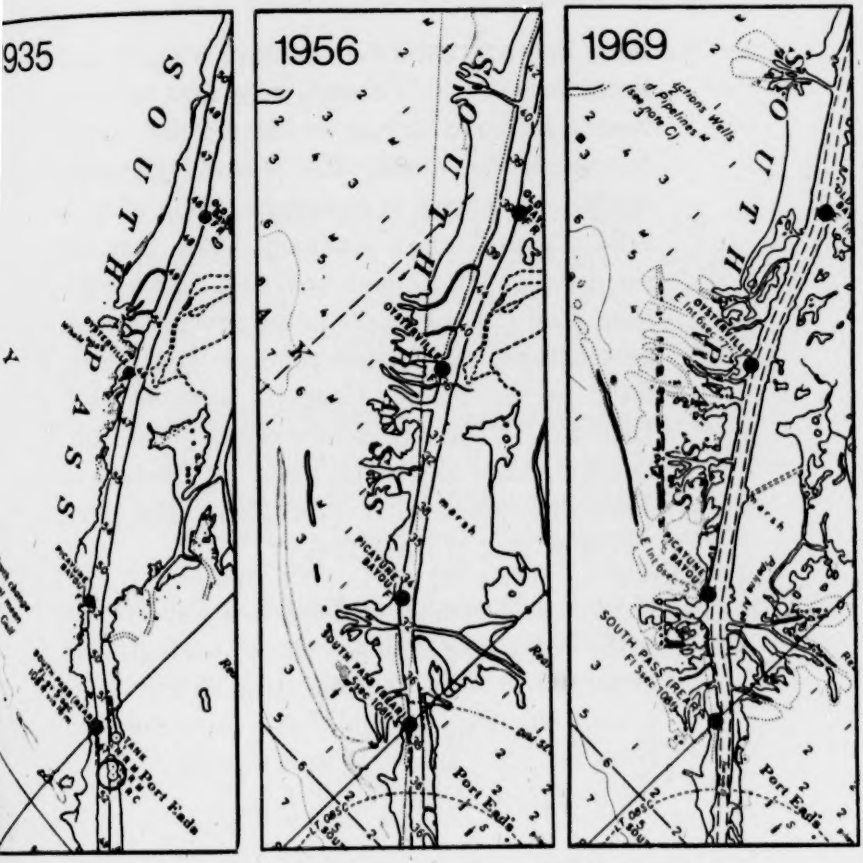

Figure 6. Comparison of South Pass portions of Chart 1272, edtions 1935, 1956, and 1969, showing progressive land building at sites of artificial cuts in the levee made by the U.S. Corps of Engineers. (La. Exhs. 164, 168, and 124.)

East Bay are such that it would have been unnatural had the inhabitants of its shores not exercised continuous sovereignty over its shores and

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waters from the earliest times forward without any objection from foreign nations.

A. East Bay has exhibited a configuration and characteristics sufficiently bay like to have been considered a bay on charts and maps for nearly 200 years. The feature, although crudely portrayed, is designated "Bay of S. & S.W. Passes" on a January 1778 map of the delta (1968 *Louisiana Brief*, Exhibit 25, submitted in La. Exh. 21 in the Special Master proceedings) and is first referred to as "East Bay" on the Talcott Chart of 1838-39 (La. Exh. 23A). The bay is so designated on subsequent charts and maps, many of which have worldwide publication. (La. Exhs. 23A, 150, 180, 256, 258, 274, and 296.)

B. If the configuration of East Bay had become sufficiently un-bay like over its cartographic history to destroy its geographic character as a bay, the name would have been removed from the official charts under present charting practices of the U.S.C. & G.S.:

> A geographic name is applied to a particular feature which has identity. If the feature ceases to exist, the name becomes meaningless and is removed from the charts. 2 *Shalowitz* 321.

C. The waters of East Bay are completely surrounded by the lands of Louisiana, except for

the opening facing on the Gulf of Mexico. (La. Exh. 23.)

D. The numerous tributaries, natural channels, and artifidial cuts entering East Bay from South and Southwest Passes are entirely situated within the lands of Louisiana.

E. All of East Bay's waters have been and are such that they can be easily patrolled and protected by the governmental entity that has controlled its shores. (La. Exh. 8; Finding 5.P, *infra.*)

F. East Bay is well marked by headlands inside of which the mariner instinctively feels himself within the jurisdiction and dominion of Louisiana. (Deposition of Emanual Von Lubbe, La. Exh. 148, pp. 11-12; Deposition of Abraham Schouest, La. Exh. 147, pp. 10 & 16; Deposition of Christopher Dobard, La. Exh. 284, p. 83.)

G. The waters of East Bay are sufficiently enclosed to provide shelter for coastal craft. (Deposition of Abraham Schouest, La. Exh. 147, pp. 10 & 16.)

H. East Bay is not and has never been a waterway for intercourse between nations. (La. Exh. 8.)

I. Since the mid-1800s there have been settlements along East Bay's shores, including Port Eads on the east bank and Pilot Station on the

west bank of South Pass, Burrwood (and before that, Pilot's Lookout and Custom House) on the east bank of Southwest Pass, and Pilottown near the head of the two passes. Additionally, the Coast Guard has maintained stations at the mouths of both passes. (Dr. Morgan, tr. 193-94; La. Exhs. 8, 159, and 169.)

J. From the beginning of recorded history, the inhabitants of East Bay's shores have had vital economic interests in the bay, including protecting the mouths of the Mississippi for navigational purposes, protecting oyster fishing within the bay, protecting shrimping within the bay, protecting water fowl (including terns and all other species of birds) and game within the bay, preventing pollution, and exploring for and developing oil and gas resources. These activities commenced long before the Truman Proclamation of 1945 and have continued to date. See Findings 5 and 6, *infra*.

K. If the State of Louisiana had not controlled oyster fishing, shrimping, and other marine life exploitation carried on in East Bay, there would have been disastrous effects upon the biologic resources in East Bay. (J. Y. Christmas, tr. 1129-1131.)

5. Louisiana has claimed and exercised jurisdiction and sovereignty over East Bay as an inland

waterbody since entering into the Union in 1812.

A. East Bay was a navigable waterbody constituting a juridical bay in 1812 when Louisiana entered the Union, as determined from its characteristics on the 1839 Talcott chart, the first accurate cartographic portrayal of the area. (Dr. Morgan, tr. 363-364; La. Exh. 23A.)

B. Sovereignty over coastal bays in Louisiana including East Bay, was established in the State of Louisiana in 1812 by virtue of the nature of the union, after having been under the sovereignty of France, Spain and the United States (as a territory). While the United States retained all public lands except waterbottoms, title to the waterbottoms of rivers, bays, and other navigable inland waterbodies passed to Louisiana on its admission in 1812. (See Finding 6.G, *infra.*)

C. The doctrine recognizing state ownership of waterbottoms underlying inland navigable waters in *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212 (1845), is applicable to East Bay under Finding 5.A, *supra.* (*United States v. Louisiana, et al.*, 363 U.S. 1, 66, n. 108 (1960).)

D. As early as 1870 Louisiana enacted legislation (Act 18 of 1870) to regulate oyster fishing in its coastal bays. Later statutes (including Act 106 of 1886, Act 110 of 1892, Act 153 of 1902 and Act 52 of 1904) specifically asserted

ownership of the coastal waterbodies as well as the biologic resources growing on their beds. (La. Exhs. 55, tabs 1, 2, 3, 5 and 6.)

E. In 1902 the Louisiana Legislature enacted Act 52, which specifically provided:

> [T]hat all of the beds of the rivers, bayous, creeks, lagoons, lakes, bays, coves, sounds and inlets bordering on or connecting with the Gulf of Mexico, and all that part of the Gulf of Mexico within the jurisdiction of the State of Louisiana shall be, continue, and remain the property of the State of Louisiana.... (La. Exh. 55(5).)

F. During the period 1903-1918, some 58 oyster leases were granted in the shallow waters of East Bay. While the leases covered areas within three miles of the shore, the maps attached to the leases designating their extent showed East Bay to be a bay. [The Federal government admits that the waterbody qualified as a juridical bay at that time—See Finding 1, *supra.*]

G. At the time Louisiana asserted title over all bays bordering on or connected with the Gulf of Mexico (Findings 5.D & 5.E, *supra*), East Bay was clearly designated as a bay on maps of the State of Louisiana and of the United States, many of which had worldwide circulation. (La. Exhs. 23A, edition 9 1901, and 256.)

H. In 1902 East Bay was a juridical bay as recognized by the United States' admission (Finding 1, *supra.*)

I. By Act 189 of 1910, Louisiana again asserted its title to the beds and bottoms of rivers, bayous, lagoons, lakes, bays, sounds, and inlets bordering on or connected with the Gulf of Mexico. (La. Exh. 55(8).)

J. East Bay was a juridical bay in 1910 when the above statute (Finding 5.I) was enacted. (Finding 1, *supra.*)

K. Act 245 of 1910 made it unlawful, except with a license, to seine for shrimp in any waters of the State of Louisiana. (La. Exh. 55(168).)

L. Act 103 of 1926 declared the State to have ownership of all saltwater shrimp existing in the waters of the State of Louisiana, which waters were defined to include all bays and sounds along the Louisiana coast. (La. Exh. 55(173).)

M. Act 51 of June 18, 1948, enacted prior to the inception of the 1948 lawsuit, specifically recognized East Bay as "inside" waters of the State to which open and closed shrimping seasons and other regulations were applicable. (La. Exh. 55(179).)

N. In contrast to the Florida statute, dealt with in *Skiriotes v. Florida,* 313 U.S. 69 (1941), which was construed as an exercise of au-

thority over United States nationals fishing in international waters, Louisiana's various oyster and shrimping statutes dealt with waters over which Louisiana had jurisdiction and were asserted against all persons, citizens and aliens alike. (See Findings 5.0-U relating to enforcement of the Louisiana acts.)

O. Enforcement agents of the Refuge Division of the Louisiana Wild Life and Fisheries Commission, working from a base camp established in Garden Island Bay in 1911, enforced laws to protect quadrupeds, water fowl and other wildlife in the Pass a Loutre Waterfowl Management area, including the entirety of East Bay, prior to passage of the Migratory Bird Treaty Act of 1918. (Alan Ensminger, tr. 771-776.)

P. Enforcement agents of the Wild Life and Fisheries Commission and its predecessor agency, the Department of Conservation, have, at least since 1918, continuously patrolled the waters of East Bay within an imaginary line drawn between the South Pass mudlumps to the Southwest Pass jetties and three miles seaward of that line in enforcing Louisiana's fishing and shrimping statutes. (Deposition of Captain Emanuel Von Lubbe, La. Exh. 148, p. 11; deposition of Captain Abraham Schouest, La. Exh. 147, pp. 11, 13; deposition of Samuel J. Nunez, La. Exh. 145, pp. 7-10; testimony of Joseph Billiot, tr. 820-823.)

Q. In patrolling Louisiana's coastal inland waters enforcement agents of the Conservation Department and the Wild Life and Fisheries Commission have used armed vessels or have themselves been armed and have used armed force to arrest violators of Louisiana's laws. (Deposition of Samuel Nunez, La. Exh. 145, p. 6; Deposition of Captain Abraham Schouest, La. Exh. 147, pp. 6-7.)

R. Both United States citizens and foreign nationals, including Japanese, Chinese, Filipino, Mexican, and Spanish fishermen, have been required to obtain Louisiana licenses to fish in East Bay and other Louisiana waters. (Deposition of Captain Von Lubbe, La. Exh. 148, pp. 23-26; deposition of Samuel J. Nunez, La. Exh. 145, p. 14-15; deposition of Captain Abraham Shouest, La. Exh. 147, p. 12-14.)

S. Licenses of fishermen fishing in East Bay have been checked by Wild Life and Fisheries enforcement personnel without regard to nationality. (Deposition of Samuel Nunez, La. Exh. 145, pp. 14-15; deposition of Captain Von Lubbe, La. Exh. 148, pp. 24-25.)

T. Regardless of nationality, persons caught fishing without a license within East Bay or three miles seaward from the mouth of the bay have been arrested and have had charges filed against them by Louisiana enforcement officers. (Deposition of Samuel Nunez, La. Exh.

145, pp. 14-16; Mr. Billiot, tr. 821-25; deposition of Captain Von Lubbe, La. Exh. 148, p. 15.)

U. Mr. Joseph Billiot, an aerial law enforcement agent for the Wild Life and Fisheries Commission, arrested three Mexican fishing vessels in or about 1946 for violating the closed shrimping season in East Bay. These arrests were made outside of a 3-mile belt from the shore and inside the East Bay closure claimed by Louisiana. See Figure 7. (Mr. Billiot, tr. 824-25; La. Exh. 8.)

V. Louisiana enacted Act 68 of 1932, Act 367 of 1940, Act 385 of 1948, and Act 386 of 1948 to prevent pollution of State waters. (La. Exh. 59, tabs 1 through 4.)

W. Enforcement agents of the Wild Life and Fisheries Commission have conducted pollution control activities in East Bay consistent with Louisiana pollution control statutes and have issued citations for failure to comply with these regulations. (Jack Hood, tr. 1270, *et seq.*)

X. Louisiana commenced mineral leasing in East Bay on February 20, 1928 by awarding State Mineral Lease 192 to E. C. Andrus on that date, which lease specifically named East Bay. This remains an active lease in which numerous agreements were entered into between the lessee and subsequent transferees, selec-

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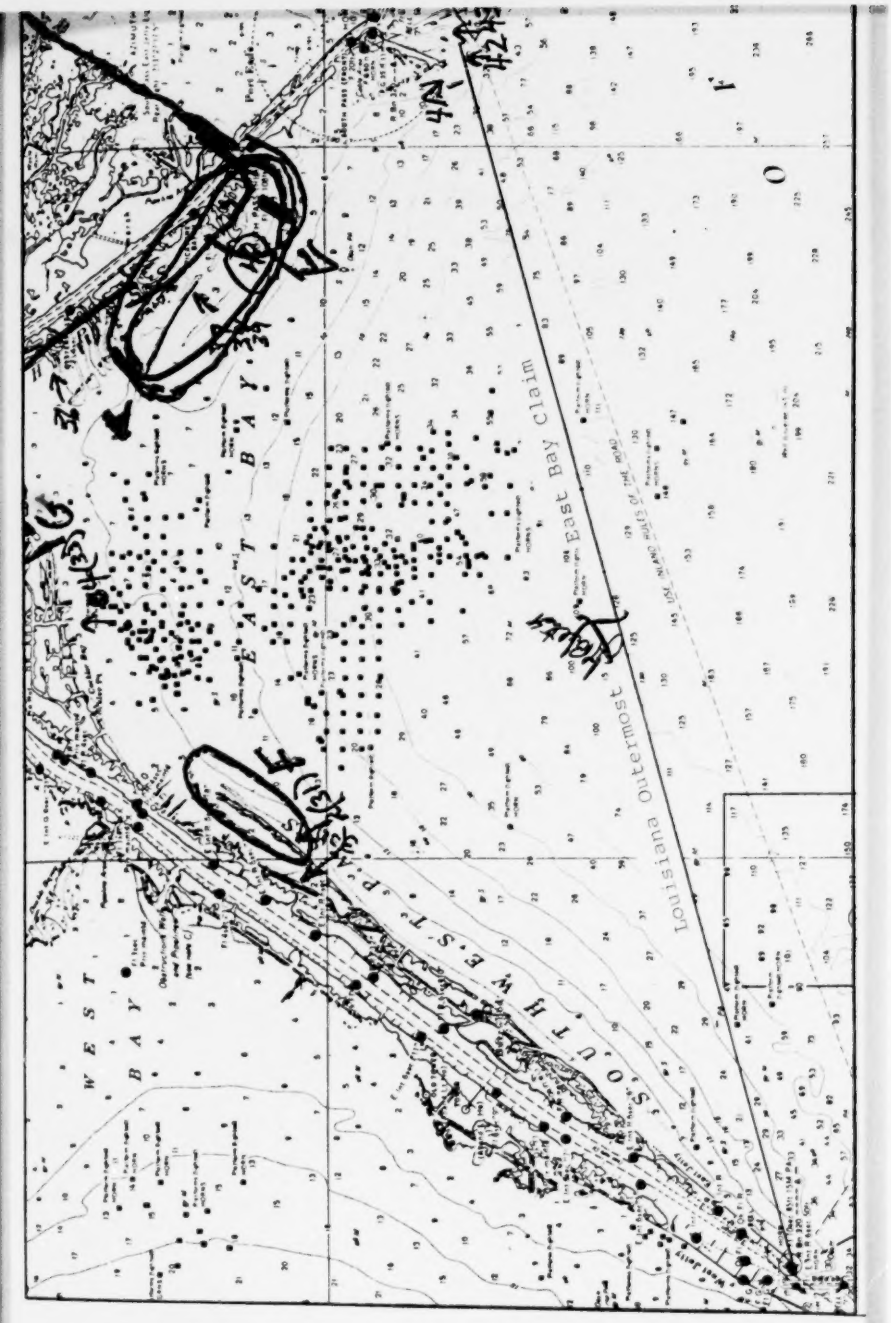

Figure 7. Reduced portion of La. Exh. 8 upon which Mr. Joseph Billiot designated the approximate location of his arrest of three Mexican vessels. Superimposed is Louisiana's outermost East Bay claim.

ED CLOSE TO EDGE

tions were made and filed, Division Orders were signed and filed, and royalties were paid. All of these acts are on file with the State Land Office. As partial releases were obtained other leases were given; parts of the original Lease 192 area are still subject to that lease. (La. Exh. 92; Mr. Ory Poret, tr. 1497, *et seq.*)

Y. Subsequent to the Truman Proclamation of 1945, Louisiana issued twenty leases covering virtually all of East Bay. Louisiana continued leasing the bed of East Bay until enjoined by the Supreme Court in 1956. (La. Exh. 58, tabs 35-54; La. Exh. 95.)

Z. Although the leasing in East Bay involved various administrative and regulatory activities, the record of which was public, none of the leases were ever challenged by the United States prior to the declaration of the 1945 Truman Proclamation. (See Finding 5.AA, *infra.*)

AA. The Continental Shelf doctrine originated in 1945 with the proclamation of President Harry S. Truman and only later matured into international law. Consequently, exclusive acts of jurisdiction pertaining to exploitations of the sea bed, (such as exclusive mineral leasing or oyster leasing prior to the Truman Proclamation) cannot reasonably be explained as having no territorial import because of the Continental Shelf doctrine.

6. Louisiana's claim to East Bay has never been disputed or questioned by foreign governments, nor was the claim disputed by the United States government until the inception of the lawsuit in 1948. To the contrary, all evidence indicates that both foreign governments and the Federal government acquiesced in Louisiana's claim.

   A. The Inland Water Line, established under Congressional Act of 1895, has designated East Bay as inland waters, at least for purposes of navigation regulation, since 1895. (La. Exh. 98.)

   B. On August 8, 1907, the United States, by Executive Order of President Theodore Roosevelt, created the Tern Islands Reservation, which included the entirety of East Bay. This reservation was set aside as a preserve and a breeding ground for native birds prior to any migratory bird treaty. (La. Exh. 28, tabs 1, 4, 5, and 6.)

   C. The Tern Islands Reservation was designated on many maps of general circulation. (La. Exhs. 256D, 258, and 270.)

   D. This area was patrolled by Louisiana, under authority of the United States, to protect birds. (La. Exh. 28(2); Mr. Ensminger, tr. 776.)

   E. Dr. George H. Lowery, Jr., an internationally known ornithologist, testified that the designation of the small islands without control

over the surrounding water would have been ineffective and that he interpreted the Proclamation as including the islands and surrounding waters, which included East Bay. (La. Exh. 30, Dr. Lowery, tr. 692-99; Implementation of Migratory Bird Treaty in 1918, 40 Stat. 755.)

F. Representatives of the United States, in interpreting a similar proclamation for a reservation at Shell Keys, recognized that the birds in the reservation would not tolerate disturbance in the surrounding water areas. (La. Exh. 28(27), a memo by Warren S. Bourn, a biologist with the U.S. Interior Department, dated October 17, 1956; 45 Stat. 1222; 43 Stat. 98; Louisiana Act 52 of 1921; Dr. Lowery, tr. 702-06 and 742-44.)

G. The United States, in response to Louisiana's Request for Admission, stated:

> The United States is not aware that any foreign power has attempted to assert any jurisdiction over the deltaic area within the broken lines shown on the plat attached to the Proclamation of August 8, 1907 [which included East Bay], creating the Tern Islands Reservation, since that date, or indeed, since the effective date of the Louisiana Purchase of 1803. Earlier, jurisdiction over the portions of the mainland lying within the area encompassed by that line was as-

> serted by France from April 9, 1682, to November 3, 1762, by Spain from November 3, 1762, to October 1, 1800, and by France from October 1, 1800, to April 30, 1803, to the extent that the mainland extended into that area at those times. The United States is not able categorically to admit or deny the matter requested to be admitted, because it has not undertaken the historical research that would be necessary to enable it to do so. (Insert ours. La. Exh. 150.)

During the pendency of the Special Master proceedings the United States, having had sufficient time to undertake the research necessary to categorically deny the matter, has made no further statement on this point.

H. In its Request for Admissions, Louisiana asked:

> Is it not a fact that no foreign power has questioned the rights asserted by the President of the United States over the area referred to in Admission No. 1?

And in response, the United States said:

> No foreign power has questioned the right of the President of the United States to designate as a bird reservation the islands lying within the area referred to in Request for Admission No. 1. (La. Exh. 150, tab 2, p. 2.)

I. The United States Department of Commerce

Census Bureau, in a 1937 delimitation of the outer limits of the United States territory made in conjunction with the 1940 Census, delimited the entirety of East Bay as internal, or State, waters from the terminus of South Pass to the tip of the Southwest Pass jetties. See Figure 8 below. (La. Exh. 52(1).)

J. The Census Bureau delimitation, made in accordance with juridical bay rules advocated or utilized by the State Department in its international relations, represents a comprehen-

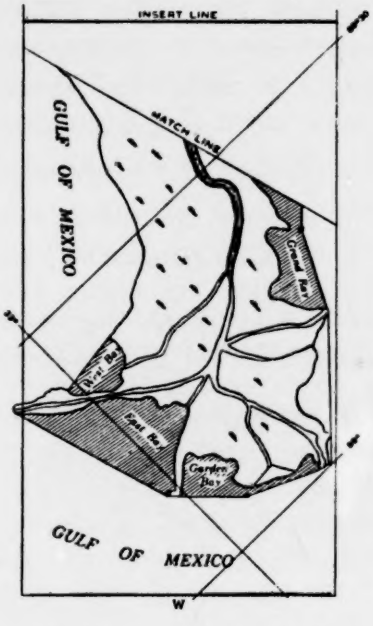

Figure 8. Portion of Plate VIII from *Measurement of Geographic Area*, p. 45 (La. Exh. 52(1).)

sive, unbiased delimitation of the internal waters along Louisiana's coast at an unsuspicious time for objective reasons prior to the inception of the 1948 lawsuit. (See finding 2.H *supra*; La. Exh. 52(1).)

K. The Census Bureau delimitation was published in 1946, just two years prior to the inception of the 1948 lawsuit. (La. Exh. 52(1).)

L. Unlike other delimitations of the United States jurisdictional limits that contained disclaimers (*e.g.*, Tariff Commission study and U.S. Exh. 416D), the Census Bureau's delimitation was not disclaimed for *any* purpose in the official publication of the study. (La. Exh. 52(1).)

M. *Measurement of Geographic Area*, the publication in which the 1937 Census Bureau delimitation is discussed and illustrated, was published by an official agency of the United States government—the Department of Commerce, is a public document, and as such, may be assumed to have a general and non-restricted worldwide distribution. (La. Exh. 52(1).)

N. The internal waters delimitations incorporated in the 1940 Census remeasurement and the underlying delimitation principles were reviewed and used to measure the limits of the United States by the Census Bureau in 1967. (La. Exh. 52(2).)

O. The United States has offered no evidence of

any protest by foreign governments to the United States delimitation of East Bay as internal waters, nor has it offered any records of adverse claims to East Bay by foreign nations.

P. The continuous patrolling of East Bay and enforcement by Louisiana agents of regulations throughout all of East Bay was open, apparent, and visible to all—United States nationals and foreigners alike—who may have taken occasion to examine the conditions existing in East Bay. (La. Exhs. 145, 147 and 148; Joseph Billiot, tr. 817, et seq.; See Findings 5.0-U, *supra.*)

Q. The right of Louisiana to exclude foreign fishing vessels if they did not obtain Louisiana licenses to fish in East Bay has not been questioned or protested by the nationals or the governments of the United States, China, Japan, the Phillipines, Spain, Mexico, or any other country or state. (Deposition of Samuel Nunez, La. Exh. 145, p. 15; Deposition of Capt. Von Lubbe, La. Exh. 148, pp. 24-25; See also Findings 5.0-U, *supra.*)

R. Japanese and Chinese, as well as other foreign nationals, obeyed Louisiana's exclusionary shrimping and fishing laws. (Deposition of Capt. Von Lubbe, La. Exh. 148, pp. 26-27.)

S. Regarding Joseph Billiot's arrest and detention of three Mexican fishing vessels around 1946

for entering Louisiana's waters (See Finding 5.T *supra*), no evidence has been located and placed into the record of this case that the Mexican government ever protested Louisiana's actions.

T. No evidence has been located and placed into the record of this case that Japan or any other foreign government has ever protested the enforcement of Louisiana laws excluding their nationals or requiring licenses.

U. The Captain of the Port of New Orleans asserts jurisdiction over East Bay as a representative of the United States Coast Guard. (33 CFR, subpart 3.40-75, La. Exh. 53.)

V. The probative value of navigational regulation in establishing historic title is affected by the fact that foreign vessels may often be subjected to navigational regulation extra-territorially or while exercising the right of innocent passage in the territorial sea. Geographical sovereignty as the basis of the claim is unclear in such a case. Therefore, for historic title purposes, navigational regulation is to be distinguished from other jurisdictional activity, which clearly evidences a claim of geographic sovereignty but which may be done in both inland waters and in the territorial sea.

W. Assertions of sovereignty which have been construed as ineffective to establish historic

inland waters claims involved facts where the waters were used as routes for international traffic, or involved explicit declarations clearly evidencing a limited intent. See *United States v. California*, 381 U.S. 139, rejecting the historic inland claim for the Santa Barbara channel and discussing its importance for international traffic; *Louisiana Boundary Case*, 394 U.S. 11, discussion of historic Coast Guard Line claim; and U.S. Exh. 99, p. 66.

7. Disclaimers of the Federal government are ineffective in defeating Louisiana's historic claims at East Bay, as all such disclaimers have arisen since the inception of the 1948 lawsuit.

   A. No evidence in the record of this case indicates that the United States disclaimed ownership of East Bay or any portion of that waterbody prior to the inception of the lawsuit in 1948. (*Suggested Findings of Fact and Conclusions of Law by the United States*, submitted by cover letter dated December 3, 1973 to the Special Master, Finding #6, pp. 4-5; and U.S. Exh. 108.)

   B. The Census Bureau delimitation of East Bay made in 1937 for the 1940 Census and published in 1946, is definitive evidence in the record of this case showing the United States position regarding the internal waters delimitation of that waterbody prior to the inception

of this litigation. The closure indicated (see Figure 8, *supra*) is exactly that claimed by Louisiana in this proceeding. (La. Exh. 18, Sheet 3; La. Exh. 52(1).)

C. Regarding the set of maps prepared by the Law of the Sea Baseline Committee and published in April 1971 (U.S. Exh. 416D), U.S. District Judge James von der Heydt held in the Alaska proceeding in his Findings of Fact and Conclusions of Law at p. 24:

> 107. The charts depicted by Exhibit 73 [U.S. Exh. 416D in this proceeding] were drafted by the Law of the Sea Baseline Committee at a time when this case was pending in this court. Among the members of that committee at the time was the principal attorney for the United States in this litigation. Said exhibit cannot be said to be an unbiased product. (Hodgson's depos., pp. 10-15; Exhibits HY, HX, IB, IC, IC-1.) (*United States v. Alaska*, Civil No. A-45-67.)

D. In the same Findings of Fact and Conclusions of Law referred to in 7.C supra, disclaimers similar to those offered by the United States in this proceeding (U.S. Exhs. 108 and 114) were described as "hastily prepared, based on questionable research, and offered in a self-serving effort by the federal government to have the Court disregard historic facts." (*United States v. Alaska*, Civil No. A-45-67,

p. 23 of Findings of Fact and Conclusions of Law, Finding #103(b).)

Other Mississippi Delta Bays

8. The waterbodies enclosed by distributaries of the Mississippi River delta and adjacent deltaic landforms have had configurations prior to the inception of this lawsuit sufficiently bay like to warrant their treatment as juridical bays by closing their entrances with straight baselines.

   A. At the time of the first accurate surveys in the Mississippi delta (c. 1840), all indentations lying between and adjacent to distributaries of the Mississippi River delta exhibited bay-like configurations in which average penetration inland appears to be at least half the width of their mouths, as ascertained by the semicircular method. (See Figure 9, La. Exh. 151; also La. Exh. 23A, Talcott Chart of 1839.)

   B. All major interdistributary indentations in the delta have been at least partially filled by subdeltaic sedimentation resulting from crevasses in the Mississippi River natural levees. (Dr. Morgan, tr. 115-27; La. Exh. 4, pp. 117-19, Figures 3-6; La. Exh. 5, Figures 6-8—Figure 7 is reproduced *infra* as Figure 10; La. Exh. 7, GP-17, GP-21-29.)

   C. Land construction within the bays, although emphasizing the inland nature of the waterbodies, has sufficiently reduced the water area within certain bays so that the semicircle test

Figure 9. Mississippi River Commission map of the Alluvial Valley, Mississippi delta portion, published in 1887 and based upon surveys from 1838-1887, demonstrates the bay character of all interdistributary indentations at that time. (Note: conservative delimitation techniques have been utilized so that visual comparisons will clearly demonstrate satisfaction of semicircle test.)

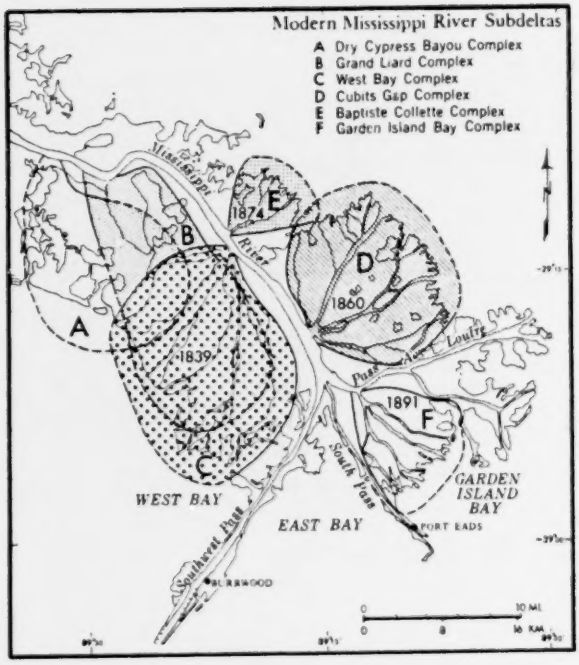

Figure 10. The subdeltas of the modern Mississippi River; dates are for initial crevasse. (From Morgan, La. Exh. 5, Figure 7.)

is not met using former geographic headlands and conservative methods of area measurement which exclude tributaries. (See *e.g.*, the effects of Joseph Bayou sedimentation and sedimentation along artificial cuts through the South Pass levee upon semicircle test calculations at East Bay (La. Exh. 23A).)

D. Subdelta sedimentation within the interdistributary bays exhibits a growth cycle composed

of several stages: initial crevasse, rapid subdelta growth, abandonment, deterioration of the subdeltaic deposit, and final reversion to an estuarine embayment. Modern subdeltas within the delta are in the terminal portions of this cycle. (La. Exhs. 4 & 5; Dr. Morgan, tr. 136-145.)

E. Assuming that the natural entrance points of the bays remain in the same approximate positions, complete deterioration of the subdeltaic deposits should result in the waterbodies once again regaining their juridical bay status.

F. Even in the present state of moderate deterioration, the Supreme Court has held that:

> [A]11 of the areas of the Mississippi River Delta which Louisiana claims to be historic inland waters are indentations sufficiently resembling bays that they would clearly qualify under Article 7(6) if historic title can be proved. 394 U.S. 11, 75 n. 100.

G. If the configuration of the delta bays had become sufficiently un-bay like over their cartographic history to destroy their geographic character as bays, the names would have been removed from the official charts under present charting practices of the U.S.C. & G.S.:

> A geographic name is applied to a particular feature which has identity. If the feature ceases to exist, the name becomes

meaningless and is removed from the charts. 2 *Shalowitz* 321.

(See La. Exhs. 21 [Sheet 26], 169, 158, 122, 170, 275, 273, 272, 159, 160, 161, 269, 162-168, 8, 277, 124, and 293 for continued use of bay nomenclature on official charts of the delta.)

9. Mudlump islands, because of their close proximity to the mouths of the major passes, which bound the interdistributary bays, and because of their pronounced and readily identifiable character, have been recognized as natural appendages of the delta coast from which Louisiana's political coastline is to be measured.

   A. The most pronounced elevations in the Mississippi delta are mudlump islands which form at and lie in close proximity to the major distributary mouths. (Dr. Morgan, tr. 292-321, 350-51; La. Exhs. 6, 10, 11, 12, and 340; deposition of Samuel Nunez, La. Exh. 145, p. 9.)

   B. Mudlump islands in the delta have been utilized since earliest times as prominent markers for navigators. Many of these features were secondarily marked with stakes or flags in early days and today are carefully surveyed and noted on nautical charts. (Dr. Morgan, tr. 242; deposition of Samuel Nunez, La. Exh. 145, p. 9; deposition of Captain Von Lubbe, La. Exh. 148, pp. 12-13; La. Exh. 21 (Sheet

26)—Talcott Chart, see also *Louisiana Brief*, Vol. V, Part 4, Figure D-13 following p. 17.)

C. In the case of *The Anna*, 5 C. Rob. 373, 385C (1805), it was held that mudlumps constitute natural appendages of the coast:

> But it so happens in this case, that a question arises as to what is to be deemed the shore, since there are a number of little mud islands composed of earth and trees drifted down by the river, which form a kind of portico to the mainland.... [T]he protection of territory is to be reckoned from these [mudlump] islands; . . . they are the natural appendages of the coast on which they border, and from which, indeed, they are formed.

(La. Exh. 25.)

D. A line connecting outermost mudlumps at the mouths of the Mississippi River follows the general trend of the delta coast. (La. Exh. 8; La. Exh. 98; Figure 9, *supra.*)

E. In the Alaskan Boundary Arbitration of 1904, U.S. counsel Hannis Taylor stated that the political coastline of the Mississippi delta is to be measured from outermost mudlumps. This statement followed and was in the general context of a discussion about political coastlines connecting outermost points along the coast of Maine and along Cuban archipelagos.

> [W]e had a great English authority in the Case of the "Anna," an Admiralty opinion pronounced by Lord Stowell (Rob. Adm., 373), in which the question arose at the mouth of the Mississippi River, whether the mud islands which are formed away out in the Gulf—whether that is the outside line of the State of Louisiana. Lord Stowell in that notable case, a case of capture during war, held that you had to go to the uttermost limit of these mudbanks in order to find the point from which to measure the political coastline. (6 *Proceedings of the Alaskan Boundary Tribunal*, 5 (1904) Sen. Doc. No. 162, 58th Congress 2d Session, 606-608—La. Exh. 356-G.)

F. The maps used in the *Louisiana v. Mississippi* opinion of the Supreme Court, 202 U.S. 1 (1906), if interpreted in light of the United States position regarding the political coastline of the Mississippi delta in the 1904 Alaskan Boundary Arbitration (Finding 9.E, *supra*), may reasonably be interpreted as inferring an offshore boundary based upon straight baseline closures between outermost points of the delta.

10. The geographic and economic characteristics of all Mississippi delta bays are such that it would have been unnatural had the inhabitants of their shores not exercised continuous sovereignty over their shores and waters from the earliest times

forward without any objection from foreign nations.

Note: Finding 4 (except part 4.1) as to East Bay is equally applicable to all delta bays. It is requested that the various subparts (except I) of Finding 4 be answered with respect to factual evidence regarding delta bays other than East Bay, in the event of a negative response to Finding 10.

11. Louisiana has asserted jurisdiction over and ownership of all waterbodies in the delta on a point-to-point (headland-to-headland) basis.

A. Title to Louisiana's coastal inland waters passed to the State in 1812 by virtue of the nature of the Union. The United States retailed all public lands, but title to navigable inland waterbodies, including bays, vested to Louisiana upon its admission.

B. In light of the unquestionable bay character of delta bays in the mid 1800s (Finding 8.A), title to these waterbodies as navigable inland waters was confirmed to Louisiana under the doctrine recognized in *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212 (1845). (See 363 U.S. 1, 66 n. 108.)

C. Commencing in 1870, Louisiana enacted legislation to regulate oyster fishing in its coastal bays. (La. Exh. 55(1).)

D. Since 1886 Louisiana has legislatively reaffirmed its title to bays along its coast, includ-

ing those in the delta. (See Acts of 1886, 1892, 1902, 1904, and 1910 La. Exh. 55, tabs 2, 3, 5, 6, and 8, respectively.)

E. At the time these legislative reaffirmations of ownership were made, large portions of the bays in the delta qualified as juridical bays despite subdeltaic growth within and were designated on widely published maps as bays. (La. Exhs. 151, 169, 158, 274, 240, 256-A, 256-C, and 170.)

F. Louisiana has granted oyster leases in the shallow waters of many Mississippi delta bays subsequent to the above (Finding 11.D) legislation. (La. Exhs. 69, 70, 72, and 73).

G. Statutes regulating shrimping in Louisiana have defined the inside waters of the delta area (to which stringent closed season laws have applied) in a progressively refined and detailed manner, as follows:

Act 108 of 1926 (La. Exh. 55(173)):

> All . . . bays and sounds found along the Louisiana Coast of the Gulf of Mexico.

Act 143 of 1942 (La. Exh. 55(177)):

> All. . . bays and sounds along the Louisiana coast, and all other waters in and contiguous to the Gulf of Mexico *whether or not partly enclosed by* islands, sand [s]pits, marshes, or *delta fingers*, wherein the water is less than three (3) fathoms in depth. (Emphasis added. The vast

majority of waters enclosed by delta fingers are less than three fathoms in depth. La. Exh. 8.)

Act 51 of 1948 (La. Exh. 55(179)):

> The inside waters shall include. . .Breton Sound, . . . Blind Bay, Garden Island Bay, East Bay, West Bay . . . and all other bays and sounds along the Louisiana coast. . . .

H. Since the early 1900s the Louisiana Wild Life and Fisheries Commission and its predecessor agency, the Department of Conservation, have used a system of boat and aircraft patrol in which imaginary lines joining outermost mudlumps and other features marking the seaward terminus of the passes and a belt of waters lying three miles from such lines have been utilized to enforce Louisiana's shrimping and fishing statutes. (Deposition of Captain Von Lubbe, La. Exh. 148, pp. 10-15; deposition of Captian Schouest, La. Exh. 147, pp. 13 & 15; deposition of Samuel Nunez, La. Exh. 145, pp. 10-13; Joseph Billiot, tr. 822-23.)

I. Arrests have been made and fines levied against persons violating Louisiana's statutes inside of the areas of the delta described in Findings 11.C to 11.H above, regardless of nationality. (See citations for Findings 5.R-5. U, *supra.*)

J. Louisiana issued mineral leases under Act 30

of 1915 as amended by Act 315 of 1926 covering most of the Mississippi delta bays prior to issuance of the Truman Proclamation in 1945. These included Mineral Lease 192 in 1928 covering West Bay and East Bay, Mineral Lease 195 in 1928 covering Grand Bay, Grand Coquille Bay and many other bays to the north of the delta contiguous with Breton Sound, and Mineral Lease 335 in 1935 covering Paddy Bay, Bull Bay, Delta Bend, Quarantine Bay, Breton Sound and Chandeleur Sound. Portions of these leases remain active. (La. Exhs. 88, 89, 90; testimony of Mr. Ory Poret, tr. 1497 *et seq.*)

12. Louisiana's claim to waters of the delta lying between and adjacent to the passes of the Mississippi River has never been disputed or questioned by foreign governments, nor was the claim disputed by the United States government until the inception of the lawsuit in 1948. To the contrary, all evidence indicates that both foreign governments and the Federal government acquiesced in Louisiana's claim. [See Findings under 6 for more specific treatment of East Bay.]

    A. The Inland Water Line, established under Congressional Act of 1895, has designated all bays of the Mississippi delta as inland waters, at least for purposes of navigation regulation, since 1895. (La. Exh. 98.)

    B. The Tern Islands Reservation, established by

Presidential Executive Order on August 8, 1907, encompassed the majority of the delta bays in question, as shown on maps of general circulation and wide publication. (La. Exh. 28, tabs 1, 4, 5, and 6; La. Exhs. 258 and 270.)

C. Both an expert employed by the United States and a prominent ornithologist recognized that such reservations must include jurisdiction over waters contiguous to the islands in question to be effective (La. Exhs. 28(27) and 30; 40 Stat. 755; 43 Stat. 1222; 43 Stat. 98; Louisiana Act 52 of 1921; Dr. Lowery, tr. 692-99; 702-06, and 742-44.)

D. The bays in question were patrolled by Louisiana, under authority of the United States, to protect birds. (La. Exh. 28(2); Dr. Lowery, tr. 704.)

E. The United States has found no evidence showing that United States jurisdiction over the area designated in the Tern Islands Reservation has ever been questioned or challenged by foreign nations. (See Findings 6.G-H, *supra.*)

F. The United States Department of Commerce Census Bureau in 1937 designated virtually all of the waters claimed as historic bays by Louisiana in the delta as internal or "State" waters in accordance with principles advocated by the State Department. (See Figure 8, *supra.*) This delimitation was made prior

to the inception of this lawsuit and was not disclaimed by the United States in the official non-restricted publication of that study. (See Findings 6.I-N, *supra* for citations and more detailed findings.)

13. Disclaimers of the United States are not effective in defeating Louisiana's claims to historic bays in the delta, as all such disclaimers have arisen after the inception of this lawsuit (See Finding 7, *supra*, for more specific subfindings, which are equally applicable to all delta bays.)

Caillou Bay

14. Caillou Bay qualified as a body of internal waters under principles of international and domestic law (as reflected in official documents of the United States) for at least 120 years. For at least 28 years (1940-1968), the water body was *explicitly recognized* by the United States, both prior to the inception of and during the bulk of the submerged lands lawsuit.

    A. At least as early as 1863 the United States officially recognized that insular formations can enclose inland waters. This is reflected in a transmittal from Secretary of State Seward to Mr. Tassara, the Spanish Minister, on August 10, 1863 concerning jurisdiction off the Cuban Keys. (Appendix A, p. 1.)

    B. The United States adhered to a position in international and domestic relations from at

least 1863 until at least 1968 in which straits which lead to inland waters were treated as inland waters, subject to application of bay rules. (Appendix A, pp. 7-9, 11, 12, 28-29, 32, 40, and 41.)

C. The validity of treating straits leading to inland waters under bay rules, and accordingly as potential inland waters, was not disputed at the 1930 Hague Conference, the concept being incorporated both in the Bases of Discussion (no. 17) and in the final Report of the Second Sub-Committee, under "Straits." (See Appendix A, pp. 7-8.)

D. The United States' proposal concerning assimilation of "undesirable pockets" at the 1930 Hague Conference was introduced as a *new* basis of discussion to deal at least in part with the problem of islands screening the coast. Except for possible domestic use in delimitations on the Tariff Commission Maps (U.S. Exh. 377), the method received little or no domestic recognition. The method was not accepted by the Hague Conference Committee members, the majority of whom favored enclosing islands separated by 10 miles or less with baselines. (Appendix A, p. 8.)

E. The position advocated by the United States Department of Commerce in delimiting internal waters for the 1940 Census indicates that the 1930 United States Hague Conference pro-

posal on "undesirable pockets" (14.D, *supra*) was not followed in official functions of the United States even a decade after its proposal, but instead, the 10-mile island rule was adopted, as follows:

> (1) where the coast line is regular it shall be followed directly unless there are offshore islands within ten nautical miles....
>
> * * * *
>
> (4) two or more islands less than ten and more than one nautical mile from shore shall be connected by a straight line or lines, and other straight lines shall be drawn to the shore from the nearest point on each end island. (La. Exh. 52, p. 33.)

(Appendix A, p. 10.)

F. The International Law Commission, in preparatory meetings leading up to the Geneva Conferences on the Law of the Sea, treated the system of straight baselines (present Article 4) separately from straight baselines around "groups of islands," which included both offshore islands and strings of islands along the mainland coast. (Appendix A, pp. 12-16.)

G. Because of inability to reach a decision on the subject of island groups, the International Law Commission recognized that they *may* be treated under provisions sanctioning the straight baseline system. (Appendix A, pp.

15-16.) It was specifically recognized that the problem was not settled, however, and that further consideration should be given the problem at any future international conferences dealing with such matters. (Appendix A. pp. 16 and 31.)

H. The 10-mile island rule, first recommended by the Second Sub-Committee at the 1930 Hague Conference (finding D above), later adopted by the United States for measuring the limit of United States internal waters during the 1940 Census (finding 14.E, *supra*), and discussed in the International Law Commission work from 1952 to 1956 (Appendix A, pp. 12-16), was again followed in 1961 by various agencies of the Federal government (including the Justice and State Departments) in formulating the United States position in the submerged lands controversy. (La. Exh. 178—see Appendix A, pp. 22-28, for pertinent portions of the exhibit.)

I. Numerous situations are found in domestic cases, international adjudications, and in the writings of legal scholars from the last half of the 19th century to the present wherein islands constitute the periphery of a juridical bay. Notable among these are the Zuyder Zee in Holland, Buzzard's Bay in Massachusetts, Florida Bay in Florida, and Mira Bay and St. Mary Bay in Nova Scotia. (U.S. Exh. 97,

p. 7; *Manchester v. Massachusetts*, 139 U.S. 240, 243 (1890); La. Exh. 154, p. 210; *United States v. Florida*, No. 52, Original, *Report of Albert B. Maris Special Master* (1974), pp. 38-39; U.S. Exh. 47; See Appendix A, pp. 3-6, 18-19, 26, 27, 30, and 45.)

J. Caillou Bay has exhibited a configuration and characteristics sufficiently bay like to have been considered a bay on charts and maps, many of which have had worldwide circulation, for over 130 years. (La. Exhs. 171, 196, 157, 135, 215, 151, 274, 256, 258, 207, 268, 202, 270, and 50; U.S. Exhs. 347 & 348; see also Caillou Bay Findings 51 and 52, *infra*.)

K. Using the United States' position concerning either juridical bay delimitation (Findings 1.B and 2.B-K, *supra*) or delimitations of internal waters enclosed behind screening islands (Findings 14.A-I, *supra*), Caillou Bay constituted a body of internal waters from its earliest cartographic depiction (1842 Hughes Military Reconnaissance Map) until the inception of the 1948 lawsuit (and after, as demonstrated *infra*) (1948-1951). See Figure 11, *infra*, tracing the cartographic-juridical history of the bay. (U.S. Exh. 347; La. Exhs. 198, 247, 171, 157, 215, 151, 274, 256, 268, 270, and 50; Appendix A.)

L. Although a specific internal waters closure was not drawn for Caillou Bay on the Tariff

Commission maps delimiting the territorial sea, numerous such closures can be drawn so that the resulting 3-mile belt would be landward of the jurisdictional line portrayed on the map. See Figure 12. (U.S. Exh. 377-B.)

M. The Census Bureau's delimitation of Caillou Bay in 1937, representing a *published delimitation prior to the inception of this lawsuit*, reflects a closure based upon the following long-recognized principles:

(1) where the coast line is regular it shall be followed directly unless there are off-shore islands within ten nautical miles;

(2) where embayments occur having headlands of less than ten and more than one nautical mile in width, a straight line connecting the headlands shall set the limits; however,

(3) the coast line shall be followed if the indentation of the embayment is so shallow that its water area is less than the area of a semicircle drawn using the said straight line as a diameter; and

(4) two or more islands less than ten and more than one nautical mile from shore shall be connected by a straight line or lines, and other straight lines shall be drawn to the shore from the nearest point on each end island.

No disclaimer as to the effect of the delimitation is found in the officially published Department of Commerce description. (*Measure-*

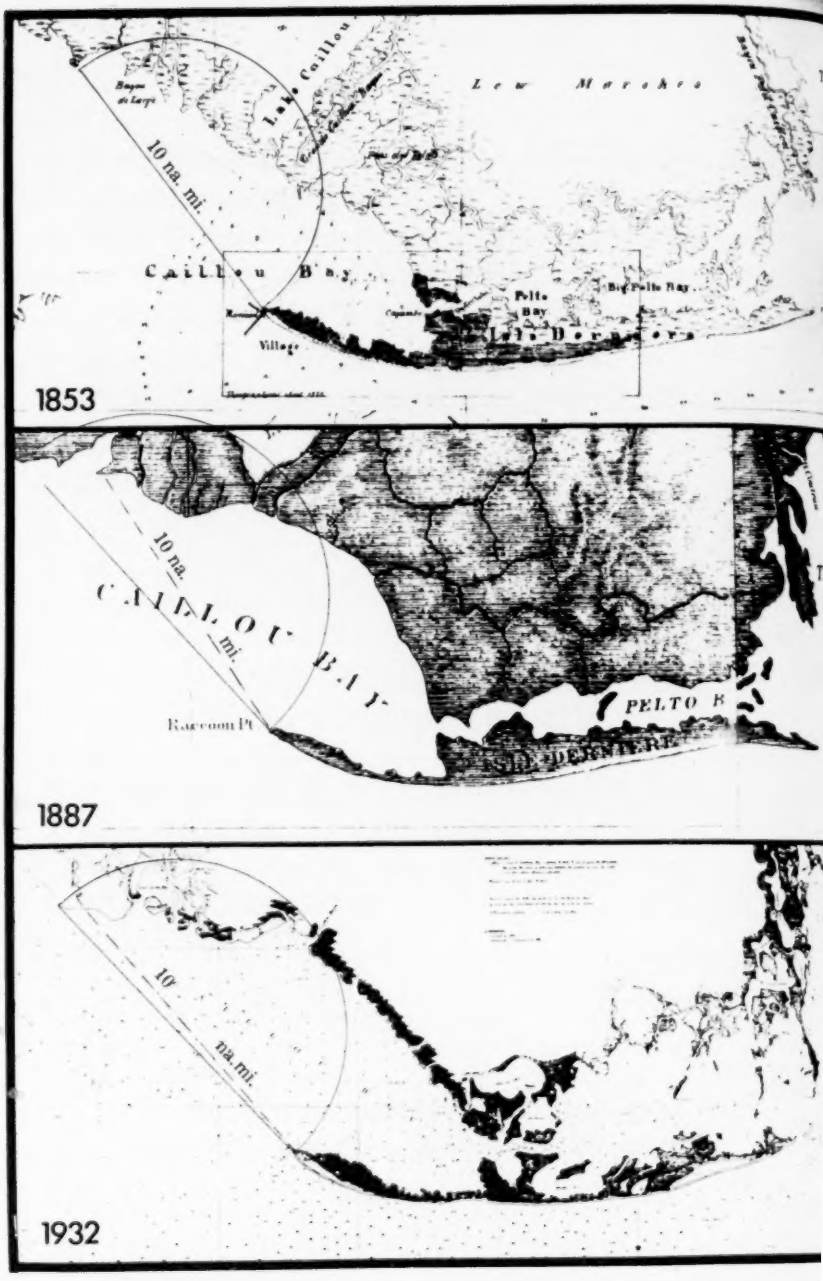

Figure 11. Cartographic-juridical history of Caillou Bay showing satisfaction of juridical bay requirements throughout the waterbody's history (base from *Louisiana Reply Brief*, Figure 158A).

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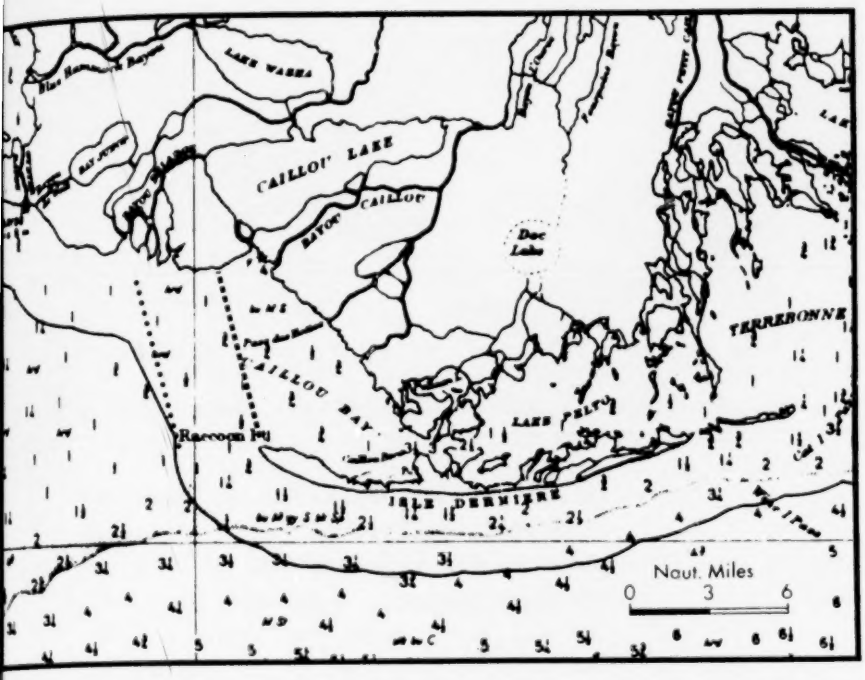

Figure 12. A portion of Chart 1116 showing the territorial sea delimitation of the United States Tariff Commission (solid line) [U.S. Exh. 377-B] and one possible inward closure across Caillou Bay (dashed line) which generates a three-mile belt (dotted line) landward of that of the Tariff Commission.

ment of Geographic Area, La. Exh. 52(1).) Figure 13 shows the official delimitation of Caillou Bay in 1940.

N. The Chapman Line, promulgated on October 26, 1950 (after the inception of the 1948 lawsuit) "as the most landward line that the Government would claim for the federal-state boundary" was based upon

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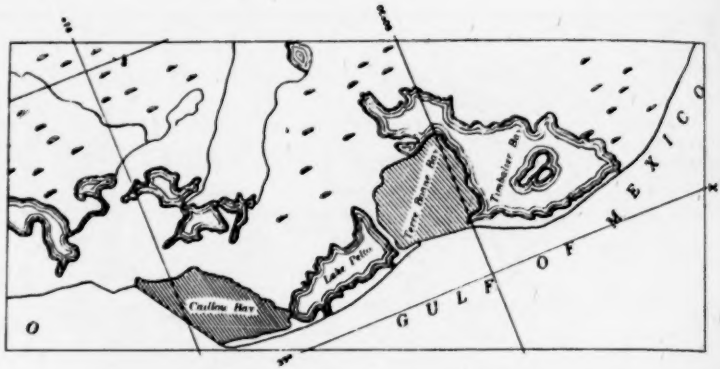

Figure 13. Plate VIII from La. Exh. 52(1), *Measurement of Geographic Area*, p. 45.

> principles [which] had been developed in international law or had been promulgated by the United States in its international relations," [including] the semicircular rule . . . and the 10-mile rule . . . for bays, and the rule for straits leading to inland waters. *Shalowitz* pp. 108-109.

This description delimited an internal waters closure from

> the northern headland at the mouth of Caillou Bay, said headland being the most southerly point on the main shore between Taylor's Bayou and Grand Bayou du Large, near latitude 29° 10′ 12″, longitude 90° 00′ 00″; thence by straight line in a southeasterly direction across the mouth of Caillou Bay to the ordinary low-water mark at Raccoon Point on the westernmost extremity of the Isles Dernieres; (Chapman Line description, U.S. Exh. 117). (See Line A, Figure 14).

(U.S. Exhs. 117, 118; 1 *Shalowitz* 108-112; Appendix A, pp. 20, 29-30; La. Exh. 286; See Finding 14.T, *infra.*)

O. In 1958, the Justice Department admitted in its *Brief for the United States in Support of Motion for Judgment on Amended Complaint* in *United States v. Louisiana, et al.*, No. 11, Original that

> . . . all the islands on the coast of Louisiana are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters.

This would include waters behind Isle Dernière, were they not considered inland waters under juridical bay principles. (Appendix A, p. 17; Finding 14.K, *supra.*)

P. Dr. G. E. Pearcy, Geographer of the State Department, in a study delimiting the baseline along the coast of the United States according to principles of the Territorial Sea Convention, recognized an internal waters closure within Caillou Bay (Figure 14, Line D). (La. Exhs. 176, 199 & 199A.)

Q. The Supreme Court recognized the inland nature of waters enclosed by islands along Louisiana's coast in *United States v. Louisiana, et al.*, 363 U.S. 1, 66 n. 108 (1960). (Appendix A, p. 21.)

R. At the request of the Justice Department, Mr. D. B. Clement of the Bureau of Land Management confected a description of the Louisiana coast in 1961 to be used in this lawsuit based upon international law principles advocated by the United States. This description contained the following internal waters closure at Caillou Bay:

> . . . Thence easterly along the ordinary low water line to the headland of Caillou Bay, said headland being the most southerly point on the main shore between Taylor's Bayou and Grand Bayou du Large, in approximate latitude 29° 10′ 12″ N., longitude 91° 00′ 00″ W.;
>
> . . . Thence by straight line in a southeasterly direction across the mouth of Caillou Bay to the ordinary low water line at Raccoon Point on the western extremity of Isles Dernieres;

(La. Exh. 178, pp. 1-2 and 8; See Figure 14, Line C.)

S. George Swarth of the Justice Department commented on the restrictive nature of the B.L.M. Caillou Bay closure (Finding 14.R, *supra*) and additional closures along the northern shore of the Caillou Bay area.

> . . . These are similar to the Chapman Line, and make a 6 3/4 mile closing line for Caillou Bay. Dr. Pearcy uses a much

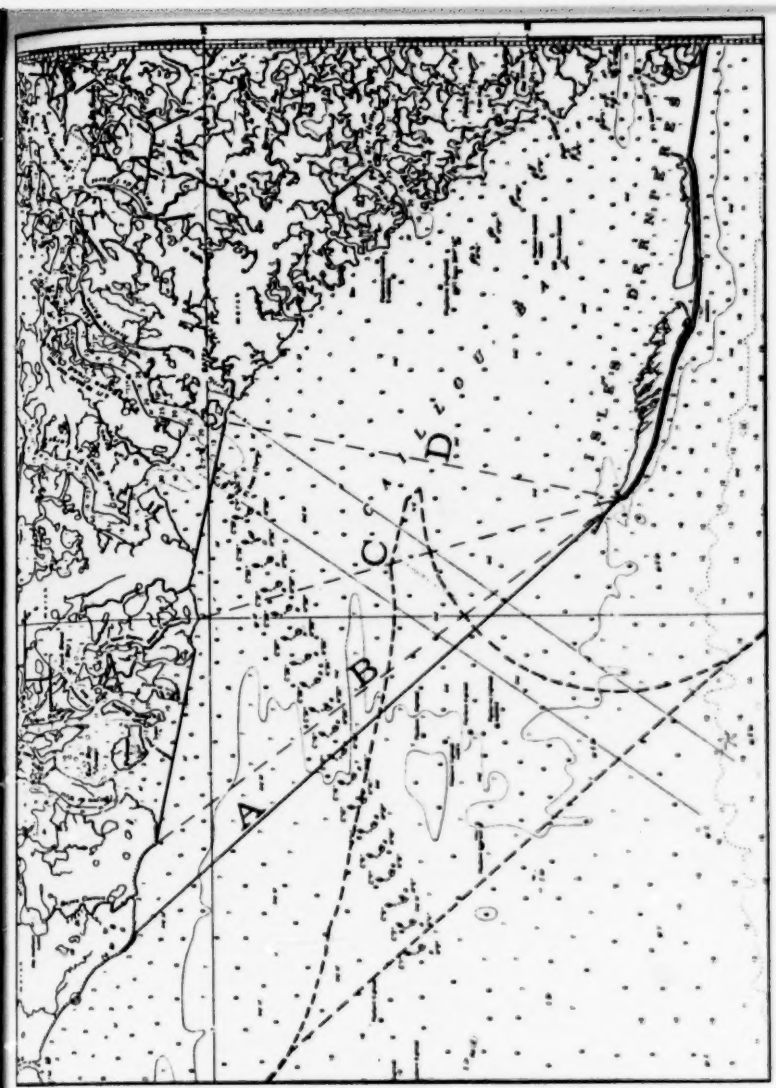

Figure 14. Portion of Chart 1275 showing Caillou Bay Closing Lines (A) claimed by Louisiana; (B) recognized in the 1940 Census Bureau delimitation of internal waters and suggested by George Swarth of the Justice Department in 1961; (C) recognized in the Chapman Line and by the Federal interdepartmental committee in 1961 and by the Federal government during meetings of the Joint (State/Federal) Committee in 1962; and (D) recognized by Dr. Pearcy, Geographer of the State Department, in 1960. Dashed lines compare 3-mile belts generated by present State and Federal claims. (Base of reduced-scale Chart 1275 from 1968 *Louisiana Brief*, Exh. 51.)

more restricted line across Caillou Bay, putting its northern terminus at the point about 0.4 mile west of the mouth of Turtle Bayou. That gives a closing line of about 6.4 miles. However, *query if the ordinary application of the 10-mile rule would not put the northern headland of Caillou Bay at the southernmost point west of East Junop Bay? That gives a closing line of about 6.8 miles and gives Caillou Bay reasonable headlands* (using Raccoon Point at the south in all cases) *and an area fully meeting the semicircle rule. While it is disadvantageous to us, our own rules seem to me to require it.* (Figure 14, Line B.)

* * *

Dr. Pearcy draws a single straight line from the west headland of East Junop Bay to the east headland of Taylors Bayou, which seems justifiable under the rules; but that would be eliminated by *the direct line to Raccoon Point*, discussed above, which *seems equally justifiable.*

* * *

This conforms to the Chapman Line. As indicated above, Dr. Pearcy puts the north headland of Caillou Bay about three miles farther east; *the justification for doing so is not apparent to me.*

(La. Exh. 178, pp. 19-20, emphasis added.)

T. A. L. Shalowitz, Assistant to the Director,

U.S.C. & G.S., although considering the more restrictive closure proposed by Dr. Pearcy in 1960, (Finding 14.P), recommended the line followed in the Chapman Line description (Finding 14.N) and adhered to by D. B. Ciement, (Finding 14.R) indicating he felt that in the absence of coastal change, the Chapman Line must be recognized,

> . . . But since the Chapman Line delineation forecloses the use of a more restrictive line in areas where no changes have occurred since the line was drawn, a retention of the closing line used in the Chapman Line delineation is recommended. This is the same as the BLM line.

This understanding is clarified by Shalowitz in Vol. 1 of *Shore and Sea Boundaries* (1962), p. 108-109,

> It was understood at the time [of the Chapman Line description—1950] that in general the line was being promulgated as the most landward line that the Government would claim for the federal-state boundary, but subject to modification, landward or seaward, in areas where the lack of up-to-date surveys prevented an accurate map delineation. . . .

(La. Exh. 178, pp. 54-55; 1 *Shalowitz* 108-109.)

U. The final Caillou Bay internal waters closure concurred in by the interdepartmental committee and transmitted to the Solicitor General read as follows:

> . . . Thence easterly along the ordinary low water line of the Gulf of Mexico to the north headland of Caillou Bay, said headland being the most southerly point on the main shore between Taylors Bayou and Grand Bayou du Large, near latitude 29° 10′ 12″ N., longitude 91° 00′ 00″ W.;
>
> Thence southerly by a straight line across the mouth of Caillou Bay to a point on the ordinary law water line at Raccoon Point on the western extremity of the Isles Dernieres; (See Figure 14, Line C.)

(La. Exh. 178, p. 96.)

V. Throughout the interdepartmental correspondence related to delimitation of Caillou Bay (Findings 14.N, P, and R-U, *supra*), the waterbody was treated as a juridical bay. As no mention is made of the 10-mile island rule being applicable at this locale, it must be assumed that the segments of Isle Derniere were considered to be an integral part of the mainland. La. Exh. 178.

W. The Federal constituents of the 1962 Joint (State-Federal) Committee appointed to consider the effects of applying the Territorial Sea Convention to the Louisiana coast recog-

nized the juridical bay character of Caillou Bay and adhered to the closure evolved in the Federal interdepartmental committee (Finding 14.U and Figure 14, Line C). (La. Exhs. 257, p. 8 & 286.)

X. Not until January 1968 did the Federal government deny that Caillou Bay constituted a juridical bay. The premise for such a change after 28 years of explicit recognition was apparently rationalized on the basis of proposed changes in international and, allegedly, domestic law by ratification and adoption of the Territorial Sea Convention. (*Motion by the United States for Entry of a Supplemental Decree* . . . pp. 20-21, 70-71, 78-80; See Appendix A, pp. 42-44.)

Y. In dialog between Arthur Dean, representative of the State Department, and Senator Russell Long concerning the United States' adoption of the Territorial Sea Convention, the basis for the United States' altered position at Caillou Bay was specifically rendered invalid.

> Mr. Dean: This treaty, being a treaty, a convention, rather, between sovereign states would not apply to relations under our Constitution between the rights of the several States and the Federal Government.
>
> Senator Long: Right.

> You know at the present time there is a case over in the Supreme Court between the State of Louisiana and the United States that is relevant to some of the matters in this treaty?
>
> Mr. Dean: Yes.
>
> Senator Long: And it is not intended in any respect that this treaty should prejudice either the United States or the State government of Louisiana in that case before the Court?
>
> Mr. Dean: That is correct, Senator.

(La. Exh. 283(16), p. 19 — See *Louisiana Brief*, Vol. I, Part 1, pp. 47-51a, for general constitutional discussion, including the above dialog.)

15. The Federal government's retreat from its long-advocated position regarding Caillou Bay as a juridical bay (or inland waterbody qualifying under the 10-mile island rule) has prejudiced Louisiana claims to that waterbody in this lawsuit.

    A. Louisiana, in good faith, continued exercising jurisdiction over the Caillou Bay area including leasing waterbottoms lying within Caillou Bay and lying within 3 geographic miles of the line recognized by the Federal government in 1950 (Finding 14.N), in 1961 (Finding 14.U) and in 1962 (Finding 14.W) and generally recognized by admission of the Justice

Department in 1958 (Finding 14.0) and by the Supreme Court in 1960 (Finding 14.Q). (La. Exh. 55, tabs 24-34; La. Exh. 96.)

B. Low-water elevations and the low-water line of the shore lying behind closures recognized by the Federal government until 1968 were not surveyed in compiling the Set of 54 Maps in the Caillou Bay area. As the United States now contends that the low-water line along the coast of the Isle Derniere segments and the interior portions of the formerly recognized bay should be utilized to delimit Louisiana's "coast line" under the Submerged Lands Act, Louisiana may be losing many square miles of jurisdiction because of its reliance upon the former United State position. (La. Exh. 300 and related exhibits and testimony; Figure 14, *supra;* Finding 47, *infra.*)

C. Louisiana's argument concerning assimilation of the Isle Derniere segments to the mainland for delimiting juridical Caillou Bay (Finding 54, *infra*) has already been prejudiced by *dicta* remarks of the Supreme Court, 394 U.S. 11, 67 n. 88, which relied upon the incomplete representation of the Isles Dernieres configuration shown on Maps 19 and 20 of 41 of the Set of 54 Maps. The Special Master has already tentatively ruled against assimilation of the island segments *based upon the Court's remark*. Tentative Draft Report of the Special Master, p. 56.

D. The correspondence between the State Department and the Justice Department, particularly but not exclusively with Solicitor General Lee Rankin, has not been presented to the Supreme Court at this time nor was it available to Louisiana until this hearing. (Appendix A, p. 20; *in camera* documents; *Louisiana Brief*, Vol. V, sealed brief.)

16. The geographic and economic characteristics of Caillou Bay are such that it would have been unnatural had the inhabitants of its shores not exercised continuous sovereignty over its shores and waters from the earliest times forward without any objection from foreign nations.

A. Caillou Bay has exhibited a configuration and characteristics sufficiently bay like to have been considered a bay on maps and charts for over 130 years. (See Finding 14,J, *supra* and 51 and 52; *infra*.)

B. The waters of Caillou Bay are completely surrounded by the lands and inland waters of Louisiana, except for the opening facing on the Gulf of Mexico. (La. Exhs. 50 & 198.)

C. The various bayous and other tributaries entering Caillou Bay are entirely situated within the lands of Louisiana. (La. Exh. 50 & 198.)

D. Caillou Bay is well marked by headlands inside of which the mariner instinctively feels himself within the jurisdiction and dominion of

Louisiana. (Finding 4.E; La. Exh. 50; Mr. Billiot, tr. 826-28.)

E. All of Caillou Bay's waters are such that they can be easily patrolled and protected by the government entity that has controlled its shores. (La. Exh. 50; Mr. Billiot, tr. 826-28.)

F. The waters of Caillou Bay have been sufficiently enclosed to provide shelter for coastal craft. (La. Exhs. 50, 138, 144, 151, 157, 268.)

G. Caillou Bay is not and has never been a waterway for intercourse between nations. (La. Exh. 50; Mr. Richardson, tr. 5085.)

H. Historic records indicate that the western portion of Isle Derniere enclosing Caillou Bay on the south was used as a resort area at least as early as the 1830s (La. Exhs. 137, 138-144, and 196.)

I. At the date of the first accurate large-scale survey of Isle Derniere (1853 - U.S.C. & G.S. survey T-410), the village of Last Island is designated, with a number of buildings and a hotel being clearly indicated. (La. Exh. 196.)

J. The village, which had attained quite a population by the mid-1850s, was totally destroyed by a hurricane in August 1856. (La. Exhs. 138-144, Dr. Morgan, tr. 2808.)

K. Caillou Bay, along with Timbalier, Terrebonne, and Atchafalaya Bays, were considered "important indentations" of the Terrebonne

Parish coast by S.H. Lockett, surveyor of "The Louisiana State University Topographical Map of Louisiana," first published in 1876. Caillou Bay is designated upon that map. (La. Exh. 135, p. 116 and map opposite p. 32.)

L. From the beginning of recorded history, the inhabitants of Caillou Bay's shore have had vital economic interests in that waterbody, including using it as a sheltered transportation route to the island resort, protecting and cultivating oyster fishing within the bay, protecting shrimping within the bay, preventing pollution, and exploring for and developing oil and gas resources beneath the bed of the bay. These activities commenced long before the Truman Proclamation of 1945 and have continued to date. (See Finding 17, *infra.*)

M. If the State of Louisiana had not controlled oyster fishing, shrimping, and other marine life exploitation carried on in Caillou Bay, there would have been disasterous effects upon the biologic resources of the bay. (J.Y. Christmas, tr. 1129-1131.)

N. The importance of shrimping in Caillou Bay is reflected by the fact that some 4000 trips are made annually to exploit this resource. (J.Y. Christmas, tr. 1125.)

17. Louisiana has claimed and exercised jurisdiction and sovereignty over Caillou Bay as an inland waterbody since entering into the Union in 1812.

A. Caillou Bay was a juridical bay in 1812 when Louisiana entered the Union, as determined from its characteristics on the 1778 Gauld map and 1842 Hughes Military Reconaissance map of the area (Finding 14.K, *supra*, and Figure 11; La. Exhs. 198 & 247; U.S. Exh. 347; La. Exh. 185-A, sheet 1; Dr. Morgan, tr. 2797-2801.)

B. Louisiana's sovereignty over Caillou Bay was established in the State in 1812 by virtue of the nature of the Union. While the United States retained all public lands except water bottoms, title to the water bottoms of rivers, bays, and other navigable inland waterbodies vested to Louisiana on its admission.

C. The doctrine recognizing State ownership of watterbottoms underlying navigable waters in *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212 (1845), is applicable to Caillou Bay under Findings 17.A & B, *supra*. (363 U.S. 1, 66 n. 108.)

D. As early as 1870, Louisiana enacted legislation to regulate oyster fishing in its coastal bays. (La. Exh. 55(1).)

E. Beginning in 1886, the Louisiana legislature enacted legislation in conjunction with oyster fishing regulation which reaffirmed the State's claim to coastal inland waterbodies. (Act 106 of 1886—La. Exh. 55(2); Act 110 of 1892—La. Exh. 55(3); Act 153 of 1902—

La. Exh. 55(5); Act 52 of 1904—La. Exh. 55(6); Act 189 of 1910—La. Exh. 55(8); etc.)

F. During the entire time that Louisiana legislatively reaffirmed its claim to Caillou Bay, that waterbody was recognized as a bay on charts and maps published by private State and Federal agencies and widely distributed. (La. Exhs. 157, 135 (p. 116, map opposite p. 32), 215, 151, 274, 256A-D.)

G. During the entire time that Louisiana legislatively reaffirmed its title to Caillou Bay, that waterbody qualified as a juridical bay under principles of domestic and international law. (See Finding 14, *supra*, especially subfinding 14.K and Figure 11.)

H. Oyster leases were granted within Caillou Bay beginning in 1905 which remained in force until the mid-1940s. (La. Exh. 55, tabs 140, 142, and 143; La. Exhs. 75 and 76.)

I. Beginning in 1910 Louisiana, began regulating shrimp fishing in waters of the State. (Act 245 of 1910—La. Exh. 55(168).)

J. Subsequent legislation supplementing Act 245 of 1910 regulating shrimping in Louisiana waters has defined the inside waters of Louisiana (to which stringent closed season laws have applied) to include Caillou Bay, by definition until 1942 and by name after that time. (La. Exh. 55, tabs 173-179.)

K. Foreign fishing vessels have stayed outside of Caillou Bay as it has been considered inside waters subject to the exclusive jurisdiction of Louisiana. (Deposition of Captain Von Lubbe, La. Exh. 148, pp. 27-28.)

L. Enforcement agents of the Louisiana Wild Life and Fisheries Commission have delimited the waters of Caillou Bay using a point-to-point system of enforcement in which the waters lying landward of a line from Raccoon Point to the landform at Bayou Junop have been regarded as inside waters of Louisiana. Enforcement activities have included a belt of waters lying 3 miles from this line as well. (Joseph Billiot, tr. 826-28.)

M. Pursuant to Act 30 of 1915,

> Authorizing the Governor to lease lands, including lake and river beds and other bottoms, belonging to the State, and providing the terms and conditions of such leases.

State Lease 188 was granted in 1928, seventeen years prior to the Truman Proclamation, concerning the area designated on the lease instrument as follows:

> All the lands, beds and bottoms belonging to the State of Louisiana, comprised within the area extending from the land or shore line of the Parish of Terrebonne, La., which land or shore line

begins at Point au Fer, and runs in a southeasterly direction until it intersects the dividing line between the Parishes of Terrebonne and Lafourceh, Louisiana, into the marginal or maritime belt of the Gulf of Mexico to the extreme limit or boundary of the domain, territory and sovereignty of the State of Louisiana, *including the beds and bottoms underlying the waters of Caillou Bay*, Lake Pelto and that portion of Timbalier Bay embraced in the Parish of Terrebonne. (Emphasis added, La. Exh. 91.)

N. Official maps of the State of Louisiana made during the period in which the above lease was in effect clearly designate Caillou Bay (La. Exhs. 256D, 258, 270).

O. Some 27 mineral leases were granted covering all or parts of the bed of Caillou Bay, both prior to and subsequent to the Truman Proclamation of 1945. (La. Exhs. 58, 86, 91, 96.)

18. Louisiana's claim to Caillou Bay has never been disputed or questioned by foreign governments, nor was the claim disputed by the United States government until 1968, two decades after the inception of the 1948 lawsuit. All evidence indicates that both foreign governments and the Federal government acquiesced in Louisiana's claim.

A. The United States Department of Commerce Census Bureau delimitation of the United States outer territorial limits made in con-

junction with the 1940 Census delimited the internal waters of Caillou Bay to be from Raccoon Point, on the westernmost point of Isle Derniere, to the landform west of Bay Junop. This delimitation was published in a non-restricted government document and was not disclaimed for any purpose. (See Findings 6.J-N and 14.M including Figure 13; La. Exh. 286; La. Exh. 52(1).)

B. The United States has offered no evidence of any protest by foreign governments to the United States delimitation of Caillou Bay as internal waters, nor has it offered any records of adverse claims to Caillou Bay by foreign nations.

C. The continuous patrolling and enforcement of fisheries regulations by Louisiana agents at Caillou Bay was open, apparent, and visible to all—United States nationals and foreigners alike—who may have taken occasion to examine conditions existing in Caillou Bay. (Joseph Billiot, tr. 826-829; deposition of Captain Von Lubbe, La. Exh. 148, pp. 27-28.)

D. The United States has offered no evidence that the right of Louisiana to designate waters of Caillou Bay as "inside waters" subject to exclusive state control over shrimp fisheries has ever been questioned by foreign governments.

E. The United States explicitly recognized large

portions of Caillou Bay as internal waters subsequent to the inception of this lawsuit in 1948 and *until 1968*. (See Findings 14.N-Y, *supra*.)

19. Disclaimers of the Federal government are ineffective in defeating Louisiana's historic claims at Caillou Bay, as all such disclaimers have arisen well after the inception of this lawsuit. (See Findings 7.A-D, 14.N-Y, and 15.A-C.)

Shell Keys

20. The waters surrounding and contained within the Shell Keys were traditionally treated as inland waters until 1961, after this lawsuit arose, under principles used and advocated by the United States.

    A. A portion of the Shell Keys area was set aside as a lighthouse reservation by Executive Orders of September 13, 1837 and July 9, 1855. (No. 2 of Plaintiffs Answers to Defendant's Interrogations One to Fourteen dated October 23, 1969.)

    B. The 1855 Order was vacated by an Executive Order dated August 17, 1907, creating the Shell Keys Reservation, as follows:

> It is hereby ordered that the Executive Order of July 9, 1855, creating the Light House Reservation which embraces a small group of unsurveyed islets located in the Gulf of Mexico about three and one-half miles south of Marsh Island,

> Louisiana, and approximately in latitude 29° 26′ north, longitude 91° 51′ west from Greenwich, as appears upon United States Coast Survey Chart No. 200, be, and the same is hereby vacated and set aside; and it is also ordered that these islets, located within the area segregated and shown upon the diagram hereto attached and made a part of this Order, be, and they are hereby reserved and set apart for the use of the Department of Agriculture as a reserve and breeding ground for native birds. This reservation to be known as Shell Keys Reservation. (La. Exh. 28(26).)

C. Both Dr. Lowery and Warren Bourn, a biologist with the U.S. Department of Interior, concurred that the designation of the reservation to include only the islets in question, without control over surrounding shallow waters, would render the reservation ineffective as a bird refuge. (La. Exh. 28(27); Dr. Lowery, tr. 727-728; See Finding 6.F, *supra.*)

D. Louisiana asserted jurisdiction over and title to the waters contiguous to and within the Shell Keys as "inlets . . . bordering on the Gulf of Mexico" by Act 106 of 1886 and many subsequent acts and by leasing portions of the area in question. (La. Exh. 55, tabs 2, 3, 5, 6, 8; La. Exh. 77.)

E. The United States has offered no evidence of protest by foreign nations to the exclusive

United States control over the shallow waters contiguous with the Shell Keys reefs.

F. Under principles adopted by the United States Department of Commerce Census Bureau in its 1937 delimitation of the limits of internal waters in the United States, the waters enclosed by the Shell Keys would have been internal waters. (See Findings 14.E & M; Appendix A, p. 10; La. Exh. 52(1).)

G. At the Florida Keys the Census Bureau delimited waters with considerably less enclosure (isolated elevations along the periphery of the Keys were used as basepoints) as internal, or State, waters of Florida. (La. Exh. 52(1), Plate VI, p. 43—a composite of which is reproduced as Figure 15; see Finding 20.N, *infra.*)

H. The United States Coast and Geodetic Survey has considered the Shell Keys area to be, for all practical considerations, a largely non-navigable area and has accordingly portrayed large portions of the area on coastal charts as having a common low-water line. See Figure 16 below.

I. In its 1958 *Brief for the United States in Support of Motion for Judgment on Amended Complaint*, p. 177, the Federal government recognized the inland character of waters enclosed by the Shell Keys:

> It happens that all the islands on the coast of Louisiana are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters. . . .

(See Appendix A, p. 17.)

J. The Supreme Court recognized the principle of islands enclosing inland waters along Louisiana's coast in 1960 (363 U.S. 1, 66 n. 108). (See Appendix A, p. 21.)

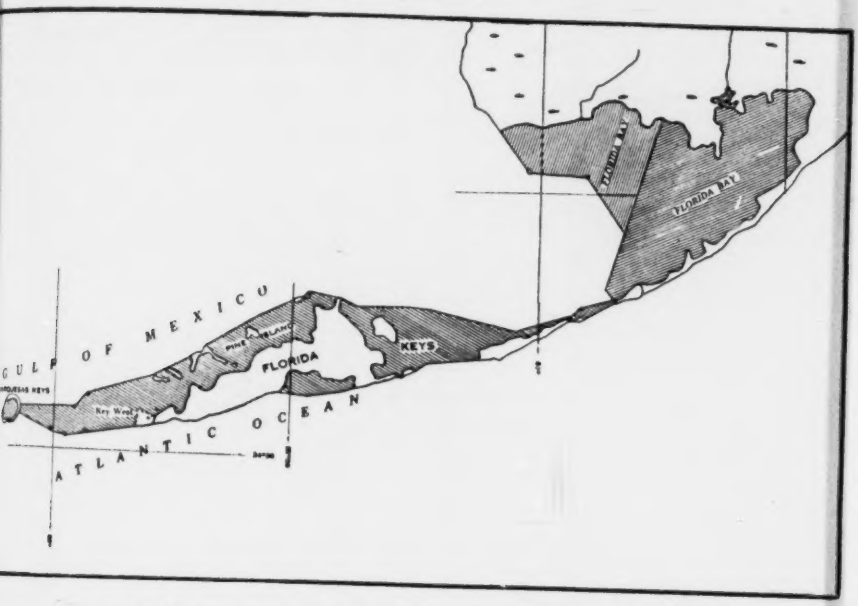

Figure 15. Delimitation of Florida's internal waters at Florida Bay and the Florida Keys by the United States Census Bureau in conjunction with the 1940 Census. Note the similarity with the holding of Special Master Maris in *United States v. Florida*, No. 52, Original (Finding 20.N, *infra*). (La. Exh. 52(1), Plate VI, p. 43.)

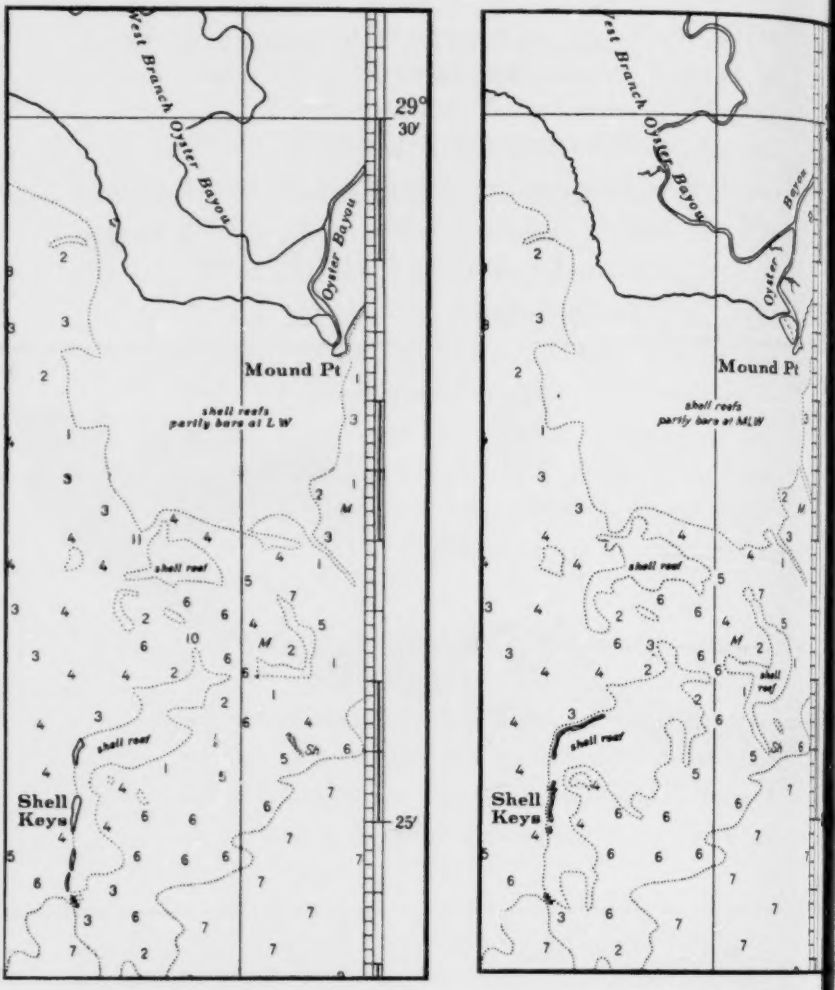

Figure 16. Chart 1277 (A) first edition (11/4/38) and (B) 14th edition (7/4/70) showing the official U.S.C. & G.S. treatment of the closely clustered reefs. Note that much of the area is surrounded by common low-water lines.

K. In 1961 Donald B. Clement of the Bureau of Land Management prepared the following description of Louisiana's coast line in the vicinity of Shell Keys to be used in this lawsuit:

> Thence in a southeasterly direction along the ordinary low water line of the Gulf of Mexico on the southern shore of Marsh Island to a point on the ordinary low water line at a prominent point on the south shore of Marsh Island in approximate latitude 29° 28′ 36″ N., longitude 91° 50′ 45″ W.;
>
> Thence by a straight line in a southerly direction to the ordinary low water line at the northwestern extremity of a group of small islands comprising the "Shell Keys";
>
> Thence in a southerly direction along the ordinary low water line on the west side of said "Shell Keys", to the southern extremity of said keys;
>
> Thence in a northerly direction along the ordinary low water line on the east side of said "Shell Keys" to the northeastern extremity of said keys;
>
> Thence by a straight line in a northeasterly direction to the ordinary low water line at the southern extremity of Mound Point on the south shore of Marsh Island, being the eastern headland of Oyster Bayou;

This description is delineated on a portion of Map 4 of 5 (La. Exh. 353) as Figure 17. (La. Exh. 178, pp. 6-7.)

L. Comments on D. B. Clement's description (Finding 20.K, *supra*) by George Swarth of the Justice Department, which led to a federal retreat from the former United States position at Shell Keys, was based upon a consideration of only the Shell Key islands and disregarded the myriad of low-water elevations that greatly augment the inland character of intervening waters.

> 6-9. This departure from the shore of Marsh Island to run the coast line around the Shell Keys, seems unjustified, as the intervening water lacks any of the characteristics of inland water. The keys are only a little more than three miles from shore, so that their three-mile belt and the three-mile belt along Marsh Island will merge, giving all the intervening submerged land to the State. In view of this circumstance, I think we may recede to this small extent from our statement to the Court [U.S. Brief, 177] that the lands between the islands and the mainland belong to Louisiana because all the islands are so situated as to enclose inland waters.

(La. Exh. 178, p. 18.)

M. A. L. Shalowitz of the U.S.C. & G.S. approved Mr. Swarth's coast line change as follows:

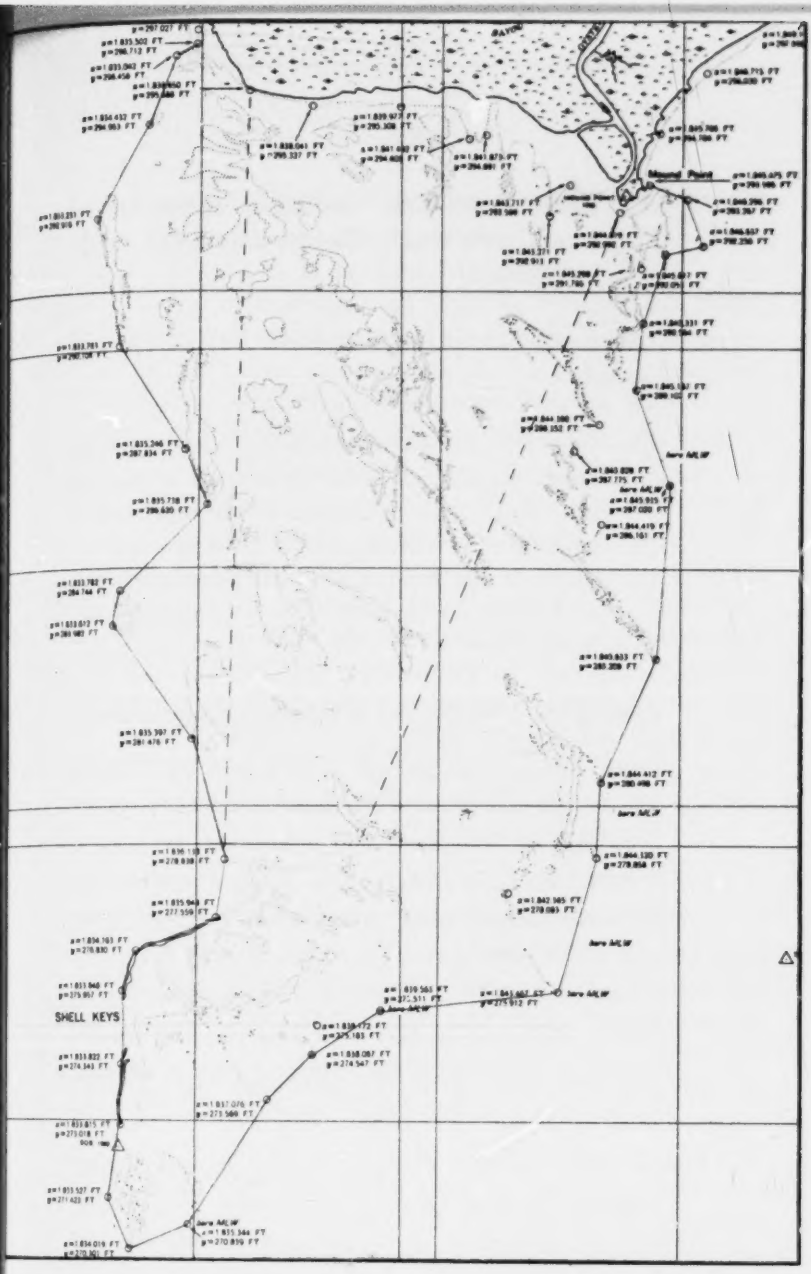

Figure 17. Comparison of Louisiana's historic claim (solid closures) with the inland waters closures (dashed) recognized by the U.S. Interior Department in applying the principle of islands enclosing inland waters recognized by the United States Justice Department in 1958 and by the Supreme Court in 1960. (See Findings 20.H-K; La. Exhs. 178 & 353 [Map 4 of 6].)

> Calls (6-9) This treatment is concurred in and follows the Recommendation made for Item (b) in Part II.

However, subsection 4 of Item (b) in Part II states:

> (4) Insofar as determining which islands form part of a land form and which do not, no precise standard is possible. Each case must be considered within the framework of the principal rule. *One indication of homogeneity might be a common low-water line.*

(La. Exh. 178, pp. 39 & 53, emphasis added.)

Note the U.S.C. & G.S. treatment on Figure 16, *supra*, of the closely clustered reefs; large portions of the area are indicated as having a common low-water line. Data from which the latest chart was compiled are based upon the 1960 low-water survey (made for purposes of this litigation), the interpretation of which is shown as the basemap for Figure 17, *supra*. (U.S. Exh. 202, Figure 17 on p. 41; La. Exh. 178; Finding 20.H, *supra*.)

N. In treating the Florida Keys, Judge Maris, Special Master in *United States v. Florida*, No. 52, Original, enclosed waters within reef groups as inland waters based upon Supreme Court rulings in the California and Louisiana submerged lands cases and the traditional

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(pre-litigation) position of the United States concerning island groups:

> The remaining islands, in the main chain of the Keys west of Knight Key, comprise three *groups* which may be considered separately, the lower Florida Keys from Money Key to Key West, the Marquesas Keys and the Dry Tortugas Islands. *In the case of each group the narrow waters within the group are inland waters of the State of Florida and the coastline follows* the ordinary low-water along those portions of the coast of the outer islands and low-tide elevations of the group which are in direct contact with the open sea and *straight lines drawn between those islands and low-tide elevations to mark the seaward limit of the inland waters between and behind them.*
>
> * * * * * *
>
> Likewise the location of the coastline of the lower Florida Keys from Money Key to Key West *as a group*, of the Marquesas Keys *as a group*, and of the Dry Tortugas Islands *as a group*, will have to be determined by the parties hereafter in accordance with the criteria hereinabove stated. It is impossible for me on the record now before me to make a precise determination of the location of the coastline of these three *groups of islands* so far as concerns *the closing lines marking the seaward limits of the narrow inland waters lying between the islands of each*

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> *group.* If the parties are unable to agree as to any of these closing lines application for further supplementary proceedings to determine them should be authorized by the Court. (Emphasis added.)

This principle of enclosure is the same as that advocated and adopted by the U.S. Department of Commerce in 1940 (see Figure 15, *supra.*) (Report of Albert B. Maris, Special Master, *United States v. Florida*, No. 52, Original, filed January 18, 1974, pp. 39, 52-53, and 55; Finding 20.G; and Finding 20.J, *supra.*)

JURIDICAL/GEOMORPHIC (ARTICLE 7) CLAIMS

South Pass to Southwest Pass: East Bay

21. From at least 6/5/50 (and as early as 4/1/44) until 12/4/50, a line approximating line A on La. Exh. 197, and more precisely shown on La. Exh. 23A (see Figure 18, *infra*) enclosed a waterbody meeting all juridical bay requirements under Article 7 of the Territorial Sea Convention. (See La. Exhs. 22 and 23A for analysis of effective dates.)

    A. The mudlump island lying at the eastern terminus of the closing line constitutes the apex of the South Pass sand spit salient and otherwise qualifies as an appropriate natural entrance point. (La. Exh. 23A, *Louisiana Brief*, pp. 134-140.)

B. Waters intervening between the above-referenced mudlump island and the mainland were so shallow that they could not be and consequently were not sounded by the USC&GS. Later editions with better defined hydrography indicated an extensive mean low-water line connecting these mudlumps to the mainland. (La. Exhs. 23A, editions of 1944 and 1955, and 216; James Richardson, tr. 5057-5064, in connection with the absence of soundings and shoaling phenomena; Finding 22.A, *infra.*)

C. The feature at the western terminus of the closing line constitutes an identifiable "minor shore form" related to the headland landform which had historically constituted the western terminus of a well-defined indentation. (1 *Shalowitz* 64; La. Exh. 23A; See Figure 5, *supra*, for a graphic summary of the geomorphic history of this headland.)

D. The penetration of the waterbody enclosed by the subject closing line is in such proportion to the width of its mouth as to enclose landlocked waters. (La. Exhs. 23A, 229, 244; Figure 18, *infra.*)

E. The water area enclosed by the subject closing line meets semicircle test requirements under the most conservative planimetry delimitation techniques. (La. Exh. 23A; Figure 18.)

22. From 12/4/50 to 9/17/56, a line approximating

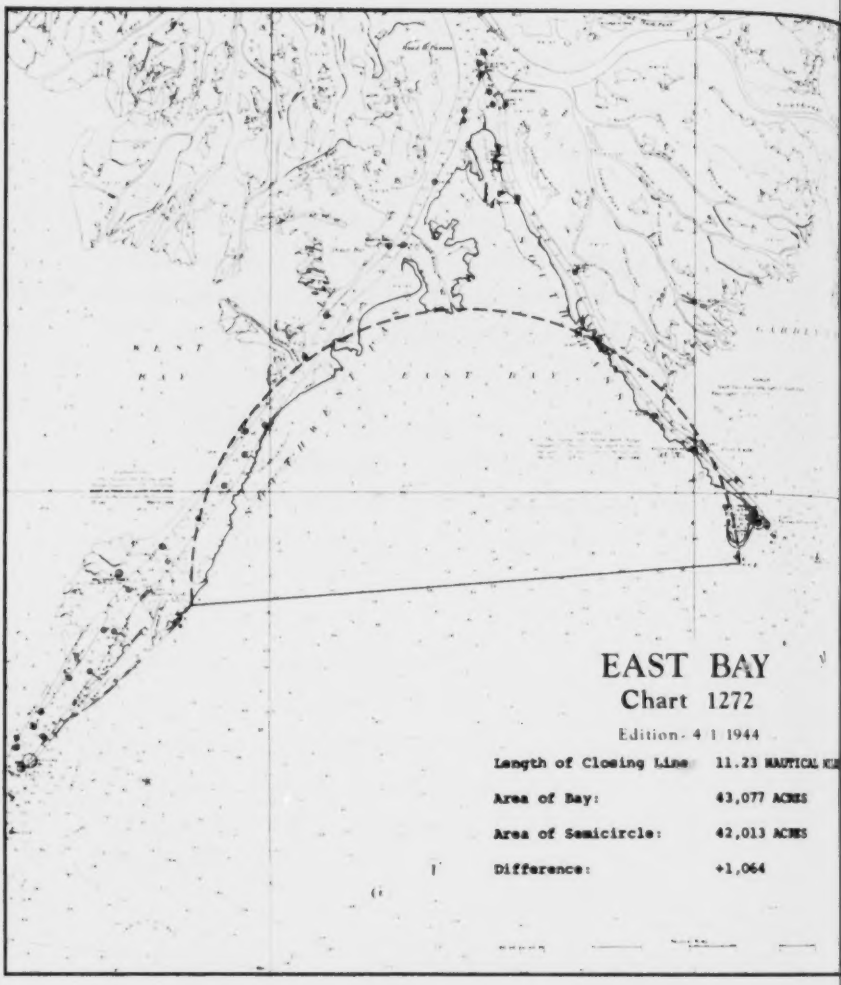

Figure 18. Portion of La. Exh. 23A showing semicircle test data for a juridical bay closure (approximating Closing Line A on La. Exh. 197) on the 4/1/44 edition of Chart 1272.

line A on La. Exh. 197 and more precisely shown on La. Exh. 23A, edition of 8/28/55 (reproduced as Figure 19, *infra*), enclosed a waterbody meeting all juridical bay requirements under Article 7 of the Territorial Sea Convention. (See La. Exhs. 22 and 23A for analysis of effective dates.)

A. The low-water line at the point marking the eastern terminus of the closing line constitutes an identifiable feature at the maximum seaward extension of the South Pass sand spit and is the apex of a coastal salient. (La. Exh. 23A; *Louisiana Brief*, pp. 134-140).

B. The feature marking the western terminus of the closure constitutes an identifiable "minor shore form" related to the headland landform which had historically constituted the western terminus of a well-defined indentation. (1 *Shalowitz* 64; La. Exh. 23A; Figure 5, *supra.*)

C. The penetration of the waterbody enclosed by the subject closing line is in such proportion to the width of its mouth as to enclose landlocked waters. (La. Exhs. 23A, 229, 242; Figure 19.)

D. The water area enclosed by the subject closing line meets semicircle test requirements under the most conservative planimetry delimitation techniques. (La. Exh. 23A; Figure 19.)

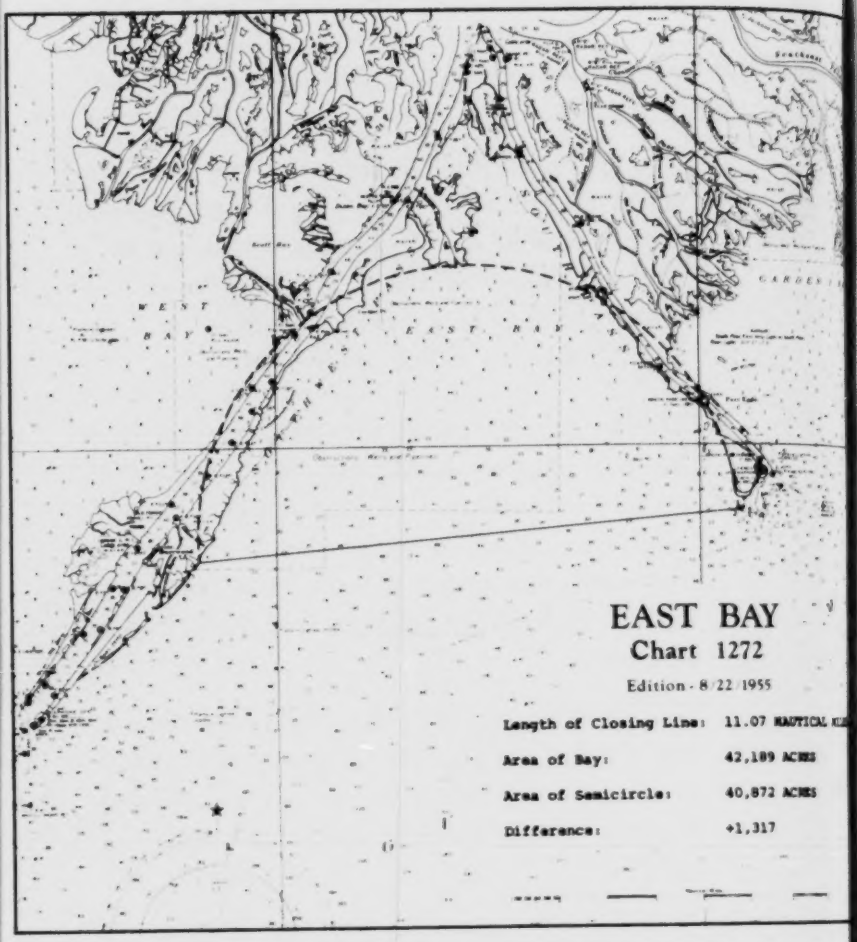

Figure 19. Portion of La. Exh. 23A showing semicircle test data for a juridical bay closure (approximating Closing Line A on La. Exh. 197) on the 8 22 55 edition of Chart 1272.

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23. From 9/17/56 to 9/17/62, a line from the northeasternmost tip of the Southwest Pass spit to a point on Cowhorn Island identified by the bisector-of-the-angle method of natural entrance point selection (shown on Figure 20, *infra*) enclosed a waterbody meeting all juridical bay requirements under Article 7 of the Territorial Sea Convention.

A. Only one pronounced headland is required to define a juridical bay, provided that the indentation otherwise meets all bay requirements under Article 7 of the Convention. (M. Strohl, *The International Law of Bays*, 62-63 (1963); California Supplemental Decree, 382 U.S. 448, 451 (1966); 1 *Shalowitz* 64-65.)

B. The northeasterly projecting spit at Southwest Pass, to which the closure is drawn in Figure 20, constitutes an apex of a salient and is accordingly an appropriate natural entrance point. (La. Exhs. 23A & 180.)

C. Cowhorn Island, the low-water feature which is virtually connected to the South Pass natural levee in 1956, existed until at least December 6, 1969 as previously ascertained by the Master and constitutes an appropriate headland landform for the subject closing line. (See Finding 29, *infra*.)

D. Under the Supreme Court's ruling in the 1966 California Supplemental Decree, the *outermost extension* of the headlands that satisfies all criteria of Article 7 must be selected in

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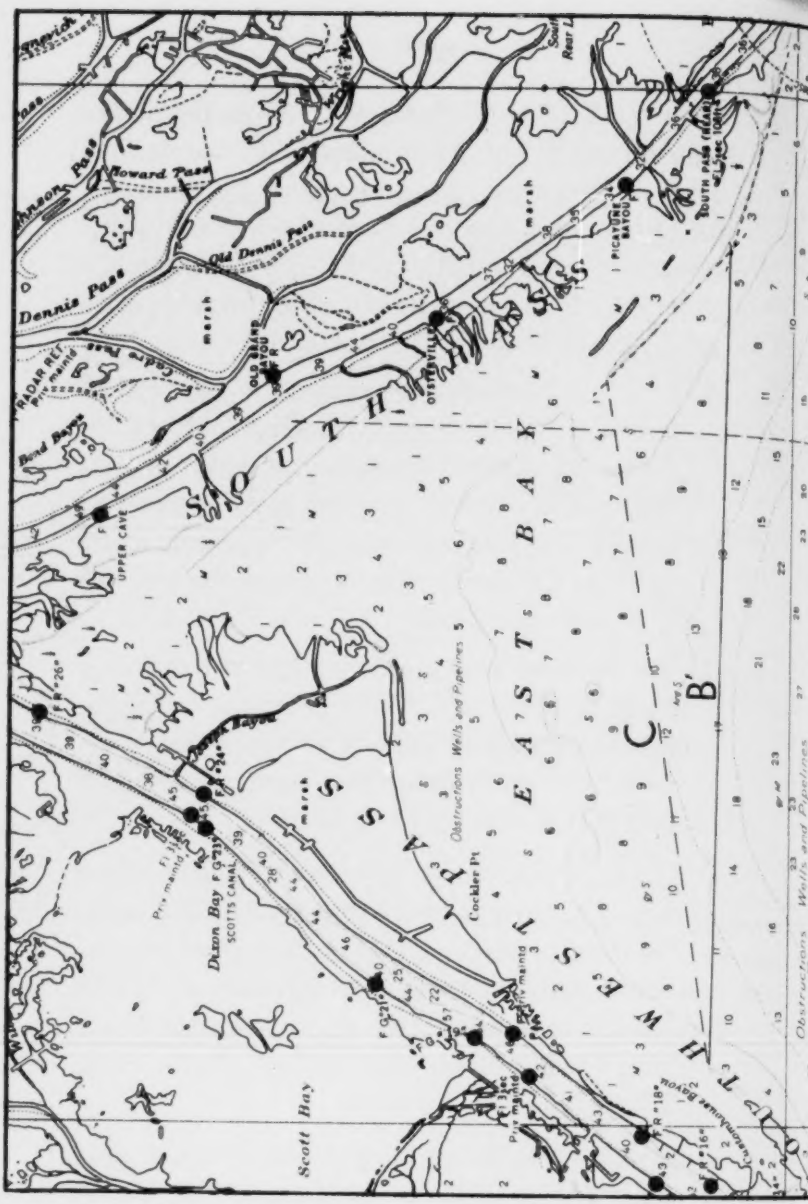

Figure 20. Portion of Chart 1272, edition of 9/17/56, showing closure [C] from La. Exh. 180 and more outward closure [B′] that satisfies all juridical bay requirements expounded by the Master, Article 7 of the Territorial Sea Convention, and the Supreme Court.

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order to enclose the maximum juridical bay area. (382 U.S. 448 at 451; also Louisiana Special Master tentative draft, pp. 34 and 38.)

E. In the absence of a pronounced headland, the bisector-of-the-angle method is appropriate. (382 U.S. 448 at 451; 1 *Shalowitz* 64-65; Figure 21 demonstrates the utilization of this natural entrance point selection method elsewhere by the United States in two virtually identical bay situations from evidence submitted in this case.)

F. The point selected at Cowhorn Island on Figure 20 has been appropriately ascertained by the bisector-of-the-angle method, subject of Finding 23.E, *supra*, and described by Shalowitz. (1 *Shalowitz* 64-65.)

G. The penetration of the waterbody enclosed by the subject closing line is in such proportion to the width of its mouth as to enclose landlocked waters. (See Figure 20, *supra*—penetration is even more clearly pronounced for this closure than for that shown on La. Exhs. 180 and 197 (Line C) and recognized by the Special Master, tentative draft, p. 38.)

H. The water area enclosed by the subject closing line [B'] meets semicircle test requirements under the most conservative planimetry delimitation techniques as demonstrated in *Louisiana Memorandum Presenting Addition-*

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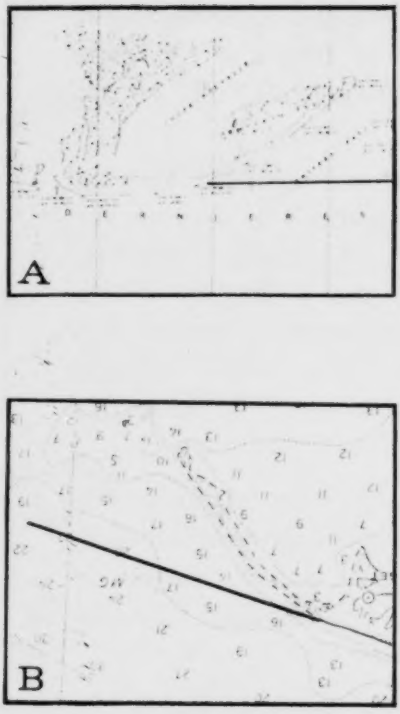

Figure 21. Comparison of natural entrance points selected by the Federal government at (A) Whiskey Pass for the Terrebonne-Timbalier Bay complex (U.S. Exh. 389, Map 19 of 41) and (B) Demarcation Bay, Alaska (U.S. Exh. 416-D, Chart 9478—inverted for comparative purposes) with (C) the natural entrance point proposed by Louisiana and rejected by the Federal government on Cowhorn Island for East Bay. Note relationship of closing line to inward shoreline of island headland landforms in question; waters located landward at Cowhorn Island (C) are more enclosed than either (A) or (B) above.

al Technical Data and Information Requested by the Special Master at the October 29, 1973 Conference, pp. 46-47, the correctness of which

data has been agreed to by the Federal government at p. 18, fn. 12 of their response to Louisiana's memorandum:

> [12] Our calculations show that each of these lines [*B'*, C, and C'] *satisfies the semicircle test.* (Emphasis added.)

24. From 9/17/62 until 12/5/69*, a line from the northeasternmost tip of the Southwest Pass spit to a point on Cowhorn Island identified by the bisector-of-the-angle method of natural entrance point selection (shown on Figure 22, *infra*) enclosed a waterbody meeting all juridical bay requirements under Article 7 of the Territorial Sea Convention.

    A. Findings 23.A through 23.G are equally applicable to the waterbody enclosed by the subject closing line, as configurations are identical along much of the bay's periphery.

    B. Cowhorn Island, the bay's eastern headland landform, is physically attached to the South Pass natural levee (see Figure 22).

    C. The water area enclosed by the subject closing line meets semicircle test requirements under the most conservative planimetry delimitation techniques. [Adding the area of the basic triangle used in Finding 23.H (2460 ac.) to that shown on La. Exh. 180 (14,529 ac.) gives a

*Date of filing Joint Pretrial Statement with the Master in Memphis. (See attached Memorandum.)

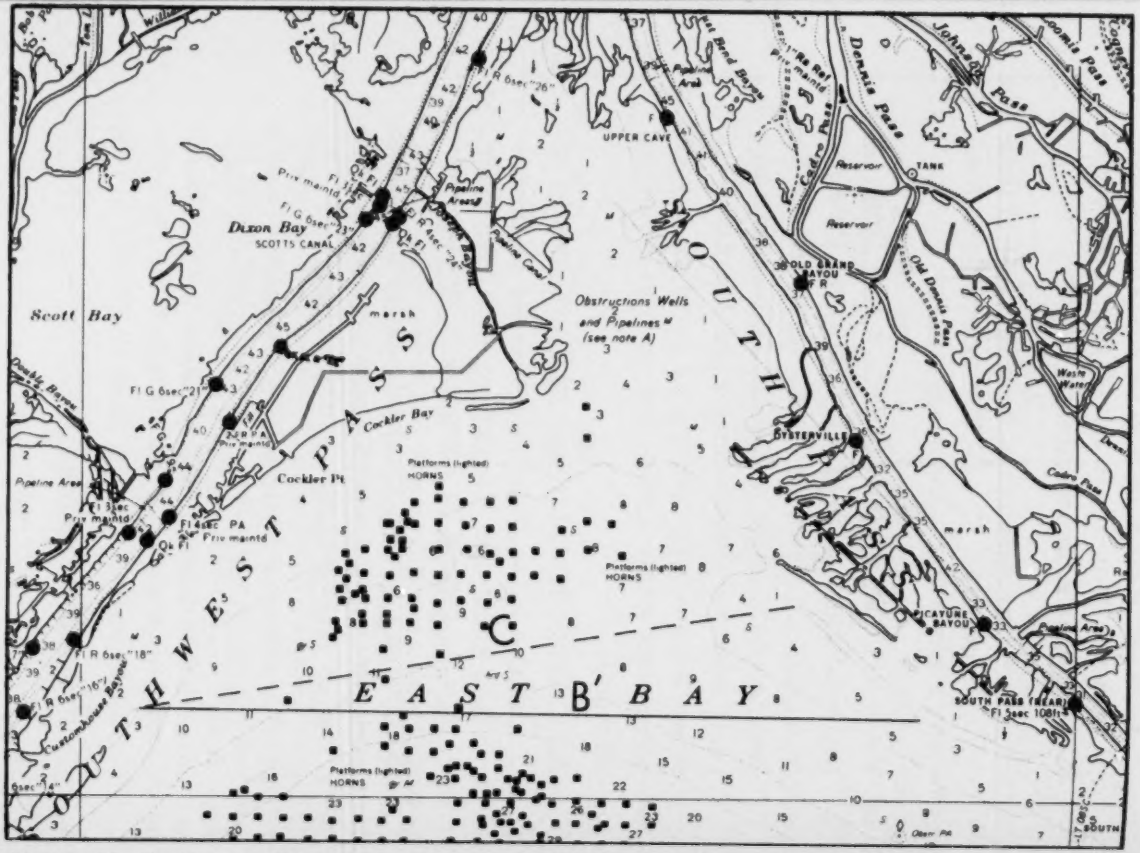

Figure 22. Portion of Chart 1272, edition of 9/17/62, showing closure [C] from La. Exh. 180 and more outward closure [B'] that satisfies all juridical bay requirements expounded by the

bay area of 16,989 acres. The closing line, being the same as in 23.H (7.00 geog. mi.), produces a hypothetical semicircle of 16,315 acres. Thus, the bay exceeds minimum semicircle test requirements by 674 acres.]

25. In the absence of affirmative holdings at Findings 23 and 24, *supra*, from 9/17/56 until 12/5/69, a line from the northeasternmost tip of the Southwest Pass spit to the northwestern terminus of Cowhorn Island (see Figures 20 and 22, also Line C on La. Exh. 197) met all juridical bay requirements under Article 7 of the Territorial Sea Convention. (La. Exhs. 180, 229, 234; Dr. Melamid, tr. 3323-28; Philip Whitaker, tr. 3961-64; Findings 23 and 24.)

26. Mudlump No. 93 (identified on La. Exh. 6, Figure 2 and Figure 5 [reproduced *infra* as Figure 23]), lying just offshore from the South Pass sand spit, is properly assimilable as the eastern headland for various potential East Bay closing lines under principles enunciated by the Supreme Court.

    A. Mudlump No. 93, lying along the axis of the South Pass sand spit, was located approximately 1230′ distant from the terminus of that feature in 1959 (Map 4 of 8). Were it not for the intervening water passage, it would be a part of the spit formation. (La. Exhs. 8, 197, 296; U.S. Exh. 374, Map 4 of 8.)

    B. Growth of the sand spit at South Pass has shown a history of mudlump incorporation as

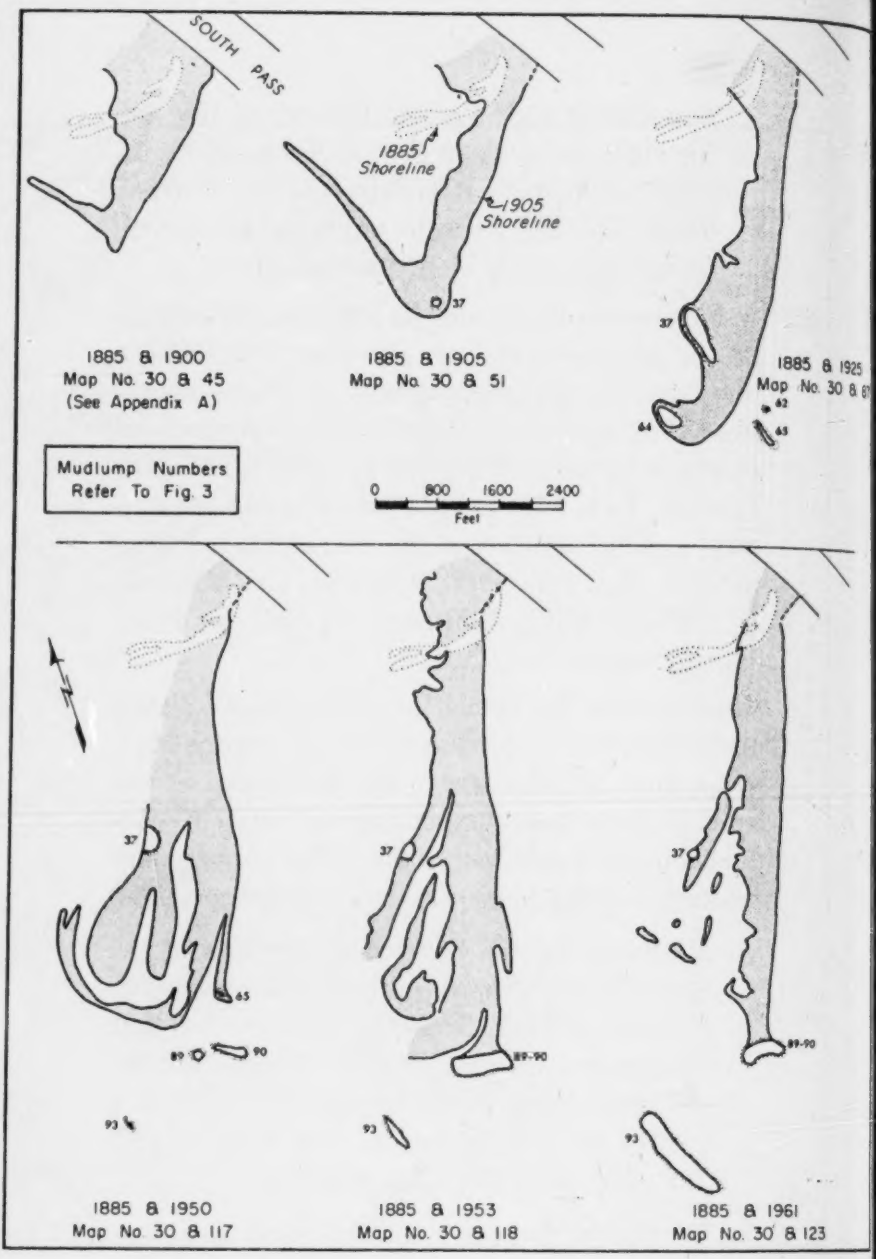

Figure 23. South Pass sand spit development and its relationship to mudlump islands (from La. Exh. 6, Figure 5).

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demonstrated by assimilation of Mudlumps No. 25, 37, 47, 64, 65, 71, 89 and 90. (La. Exh. 6, pp. 7-14, especially Figures 2 and 5 [see Figure 23]; La. Exh. 10, pp. 81-84 and Plate 4; La. Exh. 121; Dr. Morgan, tr. 325-27.)

C. Dr. Morgan prognosticated in 1963, based upon his studies from 1948 to 1963, that:

> In the not too distant future it is quite probable that island No. 93 will also become part of the mainland through further extension of the sand spit. (La. Exh. 6, p. 12.)

(See also Dr. Morgan, tr. 326-27.)

D. Despite Hurricane Camille's destruction of the sand spit on August 17, 1969, the feature has largely reconstituted itself, as postulated by Wright, Swaye, and Coleman (La. Exh. 283(13), pp. 14-17) and explained by Dr. Morgan (tr. 6270-80). (La. Exh. 340, photos No. 16-25; La. Exh. 342; *Louisiana Memorandum Presenting Additional Technical Data and Information Requested by the Special Master at the October 29, 1973, Conference*, photographs following p. 34; La. Exh. 10, pp. 78-81.

E. Water depths between the spit and offlying mudlumps are exceedingly shallow and essentially nonnavigable. (La. Exh. 216; U.S. Exh.

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200, Vol. VIII, pp. 2-3 and Vol. IX, p. 2, Dr. Morgan, tr. 6276.)

F. Mudlump No. 93 lies along potential East Bay closures and if assimilated, would give the bay a more pronounced "pinched" eastern headland landform. (La. Exhs. 197 and 296.)

27. From 12/5/69* until present, a line from the seaward terminus of mudlump No. 93 at South Pass at x=2,697,850; y=117,200 to a point near the month of Burrwood Bayou, debouching from Southwest Pass at x=2,624,995; y=108,700 (designated Line A on La. Exh. 197) has enclosed a waterbody meeting all juridical bay requirements under Article 7 of the Territorial Sea Convention, provided that Method 3 planimetry delimitation techniques (La. Exhs. 133 and 255) are employed to ascertain the bay area for semicircle test purposes. (See Figure 24.)

A. Mudlump No. 93, lying at the eastern terminus of the closing line, is assimilable to the mainland as a headland and constitutes the apex of the South Pass sand spit salient and the maximum extension of that feature seaward. (La. Exhs. 197 and 296; Finding 25, *supra.*)

B. The feature at the western terminus of the closing line constitutes an identifiable "minor shore form" which is located in the vicinity of a naturally formed headland landform that has historically constituted the western head-

*See note regarding this date at Finding 24.

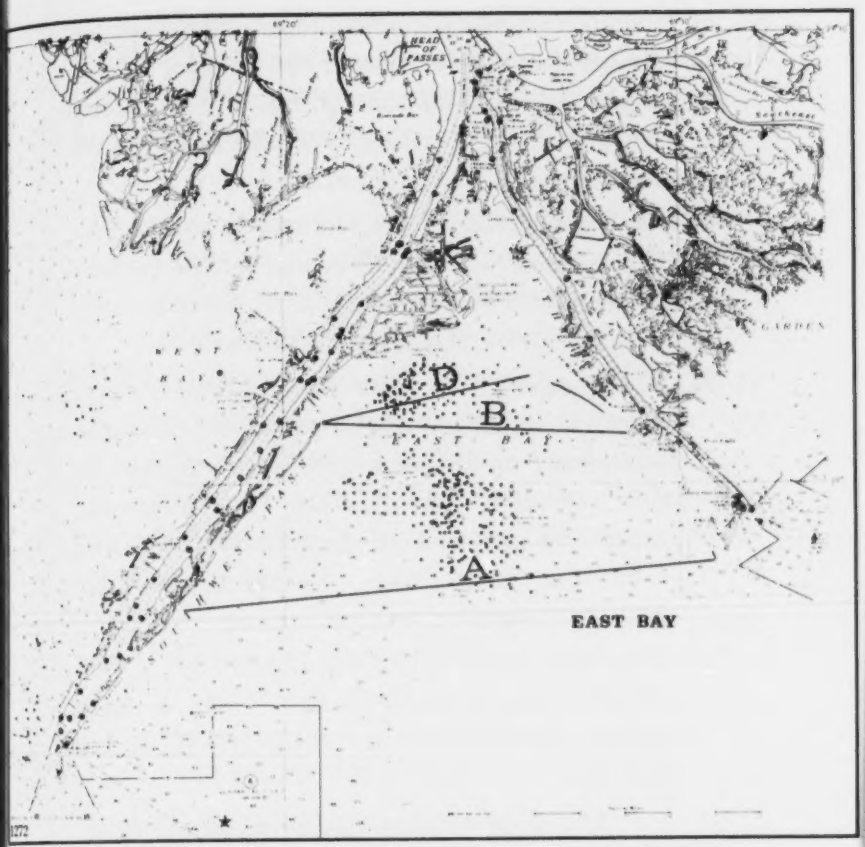

Figure 24. Reduced copy of Chart 1272 (12/6/69 edition—La. Exh. 296) showing the locations of Closing Lines A, B and D. See Figures 20 and 22 for locations of Lines B′ and C. (La. Exh. 197.)

[Note: Termini of closing lines are upon the low-water line, which has not clearly reproduced in this illustration.]

land of East Bay. (La. Exhs. 23A and 197; 1 *Shalowitz* 64; Figure 5, *supra.*)

C. Should Finding 26.B above be answered nega-

tively, the western terminus independently qualifies by application of the bisector-of-the-angle test. (1 *Shalowitz* 64-65; *Louisiana Brief*, Vol. IV, Part 3, p. 136 and Figure E-38 following p. 136.)

D. The penetration of the waterbody enclosed by the subject closing line is in such proportion to the width of its mouth as to enclose land-locked waters. (La. Exhs. 229 and 234.)

E. The so-called "V" shape of East Bay (which is only a reflection of the passes marking the waterbody on the east and west) cannot on this geometric consideration (See numerous shape comparisons in *Louisiana Brief* and *Louisiana Reply Brief*), deprive the indentation of its juridical bay status.

F. East Bay as delimited on Chart 1272 (1968 edition) has a configuration which is *inter fauces terrae*. (Dr. Melamid, tr. 3336; La. Exh. 8.)

G. The bay area exceeds the hypothetical semi-circle area by 403 acres utilizing Method 3 planimetry delimitation techniques. (La. Exhs. 197 and 255; Philip Whitaker, tr. 3961.)

28. From 12/5/69 until present, a line from a salient feature located on the levee of South Pass at x=2,685,325; y=133,800 to the northeasternmost point on the sand spit at Southwest Pass at x=2,-644,940; y=134,910 (designated Line B on La. Exh. 197) has enclosed a waterbody meeting all

juridical bay requirements under Article 7 of the Territorial Sea Convention utilizing all properly includable tributary waters of the bay for area measurement purposes. (See Figure 24, *supra.*)

A. The feature marking the eastern terminus of the closing line, whose apex lies at x=2,685,-325; y=133,800, constitutes an identifiable salient landform. (La. Exhs. 197 and 296; Dr. Melamid, tr. 3324.)

B. The feature marking the western terminus of the closing line at x=2,644,940; y=134, 910 clearly marks the indentation under consideration and constitutes the apex of a pronounced salient. (La. Exhs. 197 and 296; Dr. Melamid, tr. 3323-24.)

C. The penetration of the waterbody enclosed by the subject closing line is in such proportion to the width of its mouth as to enclose landlocked waters. (La. Exhs. 229 and 234; Dr. Melamid, tr. 3321-23.)

D. The bay area exceeds the hypothetical semicircle area if tributary waters and true islands and low-water elevations within the bay are counted as part of the bay area as directed by the Convention and by the Supreme Court. (See proposed Findings 33 through 36, *infra*; La. Exh. 197; Philip Whitaker, tr. 3960-61.)

29. The existence of Cowhorn Island, first shown on Chart 194 in 1918 and continuously portrayed on official U.S.C. & G.S. Charts 194 and 1272 until

an edition dated December 6, 1969, has not been reasonably disproved. The removal of the feature from official charts after 12/6/69 was at request of Federal counsel and was performed in a manner contrary to the long-standing practice of the U.S.C. & G.S. Marine Chart Division.

A. Cowhorn Island was removed from Chart 1272 on the 24th edition dated 12/6/69 at the request of Hugh Dolan of the NOAA staff and legal adviser for National Ocean Survey. (James Richardson, tr. 5113-14; *Louisiana Brief*, Vol. III, Part 3, pp. 8-18; La. Exhs. 8 and 124.)

B. Such removal was contrary to the long-applied standards of the Marine Chart Division, as no new hydrographic data existed for the area at the time of Cowhorn Island's removal. (Deposition of James Richardson, La. Exh. 123 at pp. 99-100 and 120-125; La. Exhs. 204-216; *Louisiana Brief*, Vol. III, Part 3, pp. 8-18.)

C. Such removal immediately followed the taking of deposition evidence that supported the existence of Cowhorn Island, at least as a low-water feature, and which justified the maintenance of that feature on Chart 1272 for some 10 years subsequent to the 1959 low-water survey leading to the Set of 54 maps in the delta area. (Deposition of James Richardson, La. Exh. 123, taken October 20, 1969;

Chart 1272, December 6, 1969 edition—La. Exh. 124.)

D. The 1970 Federal resurvey of the Cowhorn Island vicinity did not reasonably disprove the existence of the low-water feature under normal conditions. The survey was made in January 1970, only 5 months following passage of Hurricane Camille, "one of the most intense storms in recorded North Atlantic tropical cyclone history" (La. Exh. 283(13), p. 5) through the delta area. Wright, Swaye, and Coleman of the Coastal Studies Institute, commenting on the effects of Camille in the delta area stated:

> Most landforms-certainly most depositional landforms-are primarily the product of normally occurring processes which act with regularity and high frequency. However, occasional catastrophic events may modify a landscape to the extent that normal processes, once they resume, act upon a different set of "initial" conditions. In such a case form-process equilibrium will eventually be regained, but only after changes in the pre-catastrophy morphology have taken place. (La. Exh. 283(13), p. 13.)

Commenting on the destruction of the South Pass sand spit, which formerly connected mudlumps 89-90 to the mainland, they said:

> With the exception of a few sand

> patches at the extreme eastern end of the spit, the active subaerial beach was completely removed and the sands were redistributed. . . . It may be postulated that rapid reclamation of the spit will be favored by the inshore accumulation of eroded sand at depths shallow enough to enable constructive waves to reform the beach. (La. Exh. 283(13), p. 17.)

Although Cowhorn Island, lying approximately 2 miles north of the spit, was not the subject of this study, it must be assumed that a similar pattern of destruction and rebuilding would occur for that feature. Joseph K. Wilson, photogrammetrist and field inspection supervisor for the National Ocean Survey, corroraborated the observations of the Coastal Studies personnel from his own experience stating that surveys made after a hurricane do not fairly reflect the normal conditions of the shore because "the hurricane changes everything" (tr. 4677). (La. Exh. 283(13); Joseph K. Wilson, tr. 4677.)

E. The hydrographic techniques employed in the 1970 Federal resurvey of the Cowhorn Island area did not reflect normal charting hydrography techniques and cannot be said to have reasonably disproved the existence of that feature. Only *one sounding* was made at the location of the feature (6B) and recorded on U.S. Exh. 200. This single sounding showed that

at the "mean" level of the bay, the portion of Cowhorn Island at the site of the sounding was covered by only 0.2 foot, *less than 2½ inches*, of water and that because of "moderate swells," the feature actually was exposed by the same amount (0.2 foot) between "swells." (U.S. Exh. 200, Survey Area 6, pp. 1 & 4; Deposition of James Richardson, La. Exh. 123; and James Richardson, tr. 4947, *et seq.*, concerning proper charting techniques and elements of hydrographic surveying.)

30. In the absence of affirmative holdings at Findings 27 and 28, a line from the northeastern terminus of the Southwest Pass spit at x=2,644,940; y=134,910 to a point on the low-water line of Cowhorn Island located by the bisector-of-the-angle method (approximately the line designated B' on Figures 20 and 22 at Findings 23 and 24) encloses a waterbody which has qualified as a juridical bay under Article 7 of the Convention from 12 5 69 until the present. (See elements of Findings 23 and 24 *supra*, which are equally applicable to this Closing Line and Finding 29, *supra*; La. Exh. 197, Closing Line C; La. Exh. 296.)

31. In the absence of an affirmative holding at Finding 30, *supra*, a line connecting the termini of the Southwest Pass sand spit (x=2,644,940; y=134,910) and Cowhorn Island (x=2,677,650; y=138,050) encloses a waterbody which has qualified as a juridical bay under Article 7 of the Con-

vention from 12/5/69 until present. (See Finding 31, *supra*; La. Exh. 197, Closing Line C.)

32. In the absence of an affirmative holding at Finding 31, *supra*, a line joining the coordinates x=2,644,940; y=134,910 and x=2,672,315; y=141,745 (see Figure 24, Line D, *supra*) encloses a waterbody meeting all juridical bay requirements under Article 7 of the Convention. (La. Exh. 197, Closing Line D; Dr. Melamid, tr. 3321-30; Philip Whitaker, tr. 3964-65.)

33. If a waterbody otherwise qualifies as a bay, *i.e.*, is a well-marked indentation of the coast with identifiable headlands and sufficient penetration to constitute more than a mere curvature of the coast, then a conservative delimitation or interpretation of water area for semicircle test should not be allowed to defeat the juridical bay status of that waterbody.

A. A. L. Shalowitz in *Shore and Sea Boundaries*, Vol. I, p. 40, discusses the effects of applying the semicircular rule to indentations possessing the "configuration and characteristics" of a bay as follows:

> But beyond this is the overriding consideration that the bay would be inland waters under the general principle laid down in the North Atlantic Coast Fisheries Arbitration (*see* text at note 3 *supra*), and no technical method is required to determine its status. The semicircular rule was devised to provide more

specific criteria than were supplied by the arbitration; in no case should it operate as a contraction of the principle there established. Therefore, those indentations that possess the "configuration and characteristics," referred to in the arbitration would be classified as inland waters anyway. It is only those for which it may be difficult to determine whether the "configuration and characteristics" are present that more specific criteria are proposed. In other words, the technical method begins where the arbitration left off.

B. The Supreme Court has held at Ascension Bay in the *Louisiana Boundary Case*, 394 U.S. 11, 52-53 (1969), that a liberal delimitation of the bay's water area for semicircle test measurement purposes is required.

> Article 7(3) provides that for the purposes of calculating the semicircle test, "[i]slands within an indentation shall be included as if they were part of the water areas of the indentation." The clear purpose of the Convention is not to permit islands to defeat the semicircle test by consuming areas of the indentation. We think it consistent with that purpose that islands should not be permitted to defeat the semicircle test by sealing off one part of the indentation from the rest. Treating the string of islands "as if they were part of the water areas" of the single large indentation

within which they lie, "Ascension Bay" does meet the semicircle test.

C. In a similar analysis of factual island/tributary water area measurement problems in West Bay, the Supreme Court in its 1969 Opinion again required a liberal interpretation of what areas should be included within that bay for semicircle test calculations.

> We think the same result follows in West Bay, where the areas which the United States seeks to exclude from the bay are set off only by strings of islands. See n. 65, *supra*. Accordingly, should the closing line urged by Louisiana be accepted, it will not be defeated by the semicircle test. (394 U.S. 11, 53 n. 71.)

D. The language of the Territorial Sea Convention Article 7(3) supports following the low-water line wherever it might lead into subindentations, up estuarine tidal channels, and around islands and mudflats or other low-water features to the extent that the full indentation is tested, or at least to the point at which such measurement is no longer necessary (*e.g.*, see notes on La. Exhs. 23A, 26, 104, 180, 194, and 198).

> 3. For the purpose of measurement, the area of an indentation is that lying between the low-water mark around the shore of the identation and a line joining

the low-water marks of its natural entrance points.

E. This interpretation is affirmed in the principles enunciated in the Thames Estuary Case (*Post Office v. Estuary Radio, Ltd.*), 3 All E.R. 663 (1967), in which tributaries of the Thames were to be followed "so far as the tide flows and reflows" in measuring the water area of the indentation for semicircle test purposes (at 674). (La. Exh. 283(17).)

34. All islands and low-water elevations (as defined in Articles 10 and 11 of the Territorial Sea Convention) lying between the low-water mark around the shore of East Bay and a line joining natural entrance points of that waterbody should be included as if they were part of the water area of the indentation for purposes of measurement as provided by Article 7(3) of the Convention.

A. It was the clear intention of the Convention's redactors to treat all islands within an indentation as water area for purposes of calculating semicircle test data.

11. Mr. FRANCOIS (Special Rapporteur) drew attention to the second and third sentences of paragraph 2. The third sentence, which read: "Islands within a bay shall be included as if they were part of the water area of the bay" would enable any indentation to be considered as a bay provided its depth was at least half

> the closing line, even though some of the area within the bay was covered by islands rather than by sea. If a provision of that type were not included, the water area would be reduced and in certain cases might not be equal to the area of a semi-circle drawn on the entrance of the indentation—the criterion laid down for a bay in the opening sentences of paragraph 2, a criterion moreover which corresponded to the text adopted at the 317th meeting on the proposal of Mr. Garcia Amador.

(1 *Yearbook of the International Law Commission* 214-215, 319th Meeting, June 24, 1955.)

B. Recognition that islands within an indentation emphasize the inland character of its waters further supports treating *all* islands which lie within the indentation as water for area measurement purposes, regardless of island origin or configuration.

> 13. Mr. SANDSTROM pointed out that the presence of islands actually emphasized, from a geographical point of view, the inland character of the waters within the bay.

(1 *Yearbook of the International Law Commission* 215, 319th Meeting, June 24, 1955.)

C. The Supreme Court recognized this principle in its 1969 Opinion in this case.

Article 7(3) provides that for the purposes of calculating the semicircle test, "[i]slands within an indentation shall be included as if they were part of the water areas of the indentation." The clear purpose of the Convention is not to permit islands to defeat the semicircle test by consuming areas of the indentation. (394 U.S. 11, 53.)

D. The Supreme Court has held in factual situations in this case that strings of islands surrounding waters should not segregate those waters from the primary indentation for measurement purposes, regardless of the degree of enclosure. (394 U.S. 11, 52-53 — see Findings 33.B and 33.C, *supra.*)

E. Spoil islands, regardless of their proximity to the shore, must be counted as water area for semicircle test purposes in order to maintain consistency with the 1969 Supreme Court Opinion (394 U.S. 11, 40-41, fn. 48, relating to treatment of spoil banks at Pass Tante Phine).

F. Bifurcation middle ground islands should not be excluded as water area for semicircle test measurement purposes because of their fluvial origin. These features have *never* constituted a part of the mainland; their formation at the mouths of streams entering a standing body of water precludes this. If erosional islands (those formed by the deterioration or erosion of former land areas) are permitted to be

counted as water area, the fluvial islands, which have no former connective relationship with the mainland, *a fortori* should be counted as water area. (Figure 6, *supra*; Dr. Morgan, tr. 84-85 & 92-94; La. Exh. 7, GP-9.)

35. All bodies of water that are tributary to East Bay (as opposed to being more clearly tributary to a different waterbody) should be included as part of that bay's water area for measurement purposes.

A. A. L. Shalowitz recognized that the area of the whole indentation, including tributary waterbodies, should be used for comparison with the hypothetical semicircle in applying the semicircular rule to an indentation.

> In the application of the semicircular rule to an indentation containing pockets, coves, or tributary waterways, *the area of the whole indentation (including pockets, coves, etc.)* is compared with the area of a semicircle. If the indentation meets the test, a closing line is drawn across the headlands. But if it fails to satisfy the test and the indentation becomes open sea, the semicircular rule should still be applied to any of the tributary waterways for the purpose of determining their status as inland waters. (1 *Shalowitz* 219-20. Emphasis added.)

B. The principle of including subordinate waterbodies within the primary indentation for area

measurement purposes has been recognized by the Supreme Court and by The Geographer of the State Department. (394 U.S. 11, 50-53; La. Exh. 153, p. 13.)

C. Just as islands should not be permitted to consume areas of an indentation and thereby defeat the inland status of that waterbody under application of the semicircle test (394 U.S. 11, 53 — see Findings 34 and 35, *supra*), neither should exclusion of tributary waters which can reasonably be included for area measurement purposes be allowed to defeat the inland status of a waterbody otherwise qualifying as a juridical bay. (See Finding 34, *supra.*)

D. The *Thames Estuary* case provides precedent for utilizing tributary estuarine features adjoining the primary indentation in calculating the area of an indentation. (La. Exh. 283 (17).)

E. The water areas which Louisiana seeks to include as a part of East Bay's water area under Method 2 bay delimitation are tributary to *nothing* but East Bay. (La. Exhs. 8, 133, and 197.)

F. The inlets, both artificial and natural, into East Bay which Louisiana seeks to include in the primary indentation's area are all subject to influx of both saline, marine water and fresh, fluvial water. (Dr. Morgan, tr. 6311-26.)

G. Closing tributary waters off from the remaining waters of East Bay by a line across their mouths is equally as arbitrary from a legal standpoint as segregating them by a line across their heads. (Master's tentative draft, p. 36.)

H. The outer (bay) portion of the major distributary natural levees is more irregular than the inner (channel) portion. Consequently, delimiting closures along the bay boundary allows more subjective interpretation than along the channel boundary. (La. Exhs. 8, 133, and 197.)

I. Failure to include fluvial islands and tributary channels contiguous with waters of East Bay would allow that waterbody, while meeting all other juridical bay requirements, to fail to meet semicircle test requirements at Line B on the Set of 54 Maps by only 820 acres and would thus deprive the waterbody of its inland status at that closing line. (La. Exh. 197.)

36. The Joseph Bayou landform has shown a history of deterioration over the past two decades. Much information was introduced into the record of this case *prior to briefing* which substantiates massive deterioration in this area.

A. Joseph Bayou originated as a crevasse in the east bank of Southwest Pass prior to 1918 and substantially had completed construction of its subdelta into East Bay by the mid-1950s.

(La. Exh. 23; Dr. Morgan, tr. 414, 417, 419-21, 430, 432, 2686-88.)

B. Subdeltas within the Mississippi River delta have shown cyclic growth characteristics as explained at Finding 8.D, *supra*. Joseph Bayou is in the deterioration phase, demonstrating extensive loss of land. (La. Exhs. 4 & 5; Dr. Morgan, tr. 6291-6307.)

C. As in the West Bay subdelta, canalization of the Joseph Bayou landform has substantially augmented deterioration of that landform. (Alan Ensminger, tr. 767-69 and 783-801; Dr. Morgan, tr. 2366-70; La. Exhs. 8, 299, and 341.)

D. Abundant evidence in the record prior to the filing of the *Louisiana Memorandum Presenting Additional Technical Data and Information Requested by the Special Master at the October 29, 1973 Conference* in November 1973 substantiates the rapid deterioration of the Joseph Bayou subdelta. See Figures 25 and 26, *supra*, for examples of evidence in the record. (La. Exhs. 8, 9 [photos 32-41], 33-35, 193Y-AB, 299, 341 [31 photographs in one exhibit], 343; testimony of Alan Ensminger and Dr. Morgan; *Louisiana Brief*, Vol. III, Part 3, pp. 44-57.)

E. The area of the Joseph Bayou landform lying north of Joseph Bayou is characterized on charts by large ponded areas separated from

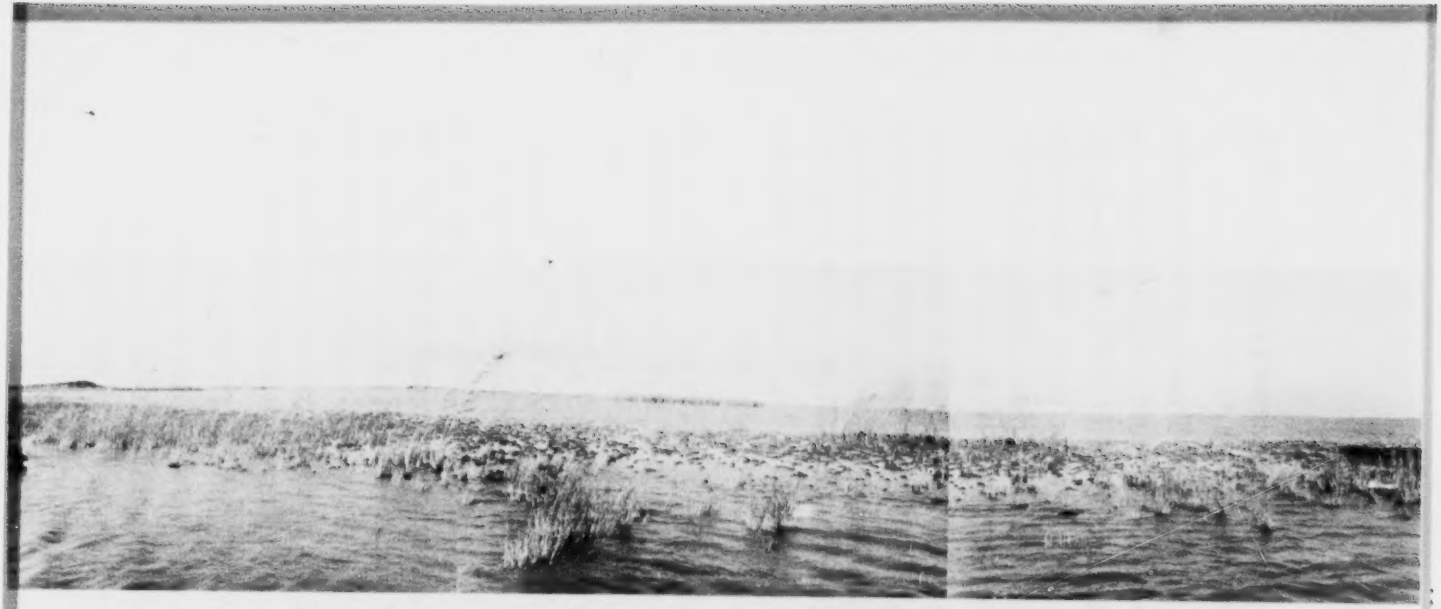

Figure E-10. From Louisiana Brief, Vol. III, Part 3, following page 52.

Figure 25. Deteriorating landform in Joseph Bayou. From La. Exh. 343 [inadvertantly numbered 383 in original filing].

Figure E-5. From Louisiana Brief, Vol. III, Part 3, following page 52.

Figure 26. Joseph Bayou Area. Note open water link to main area of East Bay. La. Exh. 9, Photographs #34, 36.

other waters within East Bay by only narrow strings of islands and peninsulas of land. (Evidence in the record shows this area to have much greater connection with East Bay than indicated on current charts, however—compare Figure 26 with the Joseph Bayou area on La. Exh. 8.) This is factually equivalent to the relationship Bob Taylor's Pond bears to West Bay; the Supreme Court held (394 U.S. 11, 50 n. 65, 53 n. 71) that waters of this pond are to be included in the area of West Bay for area measurement purposes. Waters north of Joseph Bayou (if not the entire "landmass" consisting of insular formations) should similarly be held to constitute a part of East Bay's water area.

From Dead Woman Pass to North Pass (Bucket Bend Bay)

37. The low-water elevations lying at the mouth of North Pass constitute an integral part of the mainland for purposes of delimiting the southern terminus of Bucket Bend Bay under principles enunciated by the Supreme Court (394 U.S. 11, 65-66) and adopted by the Florida Special Master.

A. The low-water elevations in question lie along the axis of the northern natural levee of North Pass and are aligned with that feature. Were it not for the intervening waters, the elevations would be a part of that formation. (La. Exh. 8; U.S. Exh. 389, Map 2 of 8; testimony of Dr. Melamid, tr. 3270-71; Figure 27, *infra.*)

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Figure 27. Comparison of 1933-1969 nautical chart configurations at North Pass showing natural progradational assimilation of low-water elevations and islands along the submarine natural levee through time (at A and C). Dashed line (labeled B) shows approximate 2′ bathymetric contour outlining the extremely shoal portion of the submarine levee.

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B. Comparison of various editions of Chart 1272 (1933-La. Exh. 162; 1935 - La. Exh. 164; 1956 - La. Exh. 168; and 1970 - La. Exh. 293) indicates that similar low-water elevations and islands have occupied equivalent positions at the tip of the North Pass levee at past times (Figure 27). Careful study of the above charts show that as the pass progrades, these low-water elevations are built above the surface as islands and incorporated into the subaerial natural levee as part of the mainland. This is substantiated by testimony and exhibits of Dr. Morgan. (Tr. 84-98; La. Exhs. 7, GP-9 to 15.)

C. According to the latest hydrographic survey, less than 1′ (one foot) water depths surround the elevations in question. Figure 28 is an overlay of the 1940 hydrographic survey (La. Exh. 344) over a portion of Map 2 of 8 (U.S. Exh. 374) to facilitate this comparison.

D. Distance between the mainland and the closest of the two primary elevations is less than 600′; distance between the above elevation and outermost elevation is less than 1000′; distance from the mainland to outermost elevation is less than 1900′. (U.S. Exh. 374, Map 2 of 8—see base for Figure 28.)

E. At Florida Bay Judge Maris held that low-water elevations lying a minimum of 4000′ from the closest land above high water (which

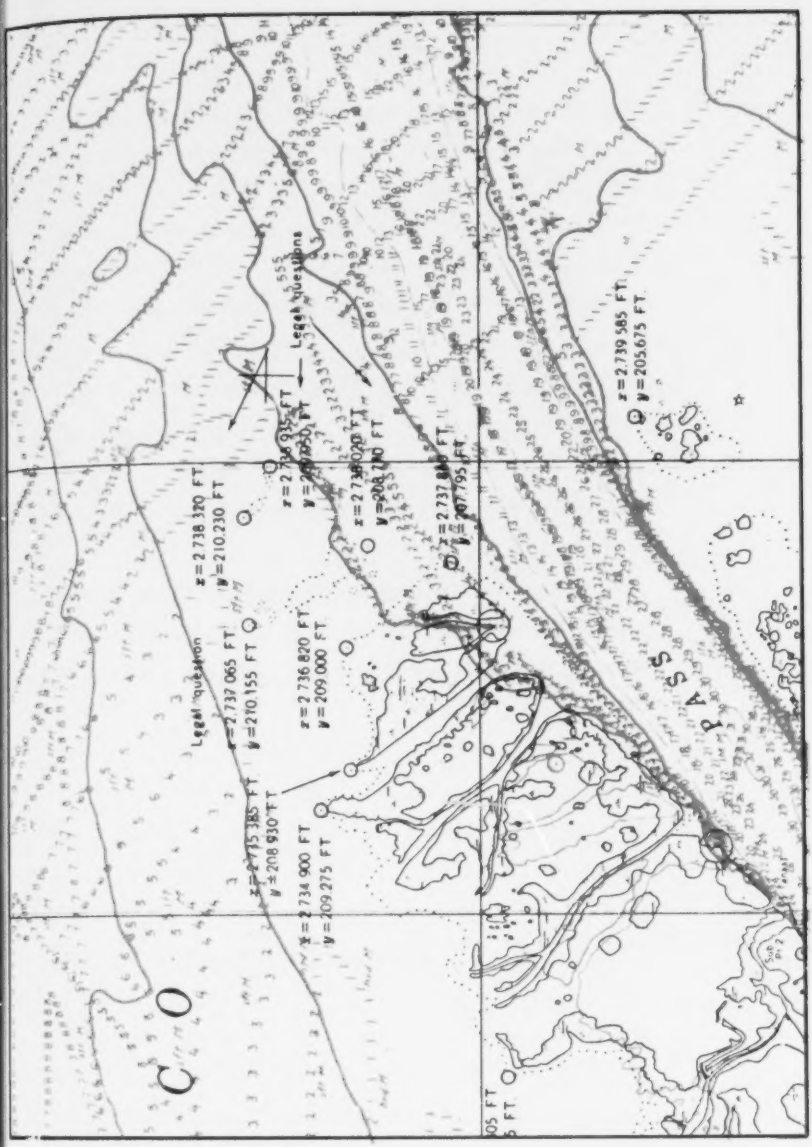

Figure 28. Superimposition of 1940 hydrography (La. Exh. 344) over planimetric configuration of 1959 (Map 2 of 8, U.S. Exh. 374) at North Pass showing *extremely* shallow waters separating low-water elevations from the mainland.

itself is an island) are assimilable to the mainland for delimiting a potential overlarge bay 24-mile baseline. (*Report of Albert B. Maris, Special Master* in *United States v. Florida*, No. 52, Original—see Figure 29 for a factual comparison with the North Pass situation.)

38. The waterbody enclosed by a line between x=2,708,835; y=221,440 at Dead Woman Pass and x=2,738,320; y=210,230 at North Pass meets all juridical bay requirements of Article 7 of the Territorial Sea Convention, assuming Finding 37 to be valid.

    A. The area defined above has sufficient depth of penetration in proportion to width of mouth to contain landlocked waters. (La. Exhs. 229 and 231.)

    B. The termini of the above line (at the coordinate-described points) constitute maximum extensions of land into the water and apexes of salients of the coast. (Dr. Melamid, tr. 3270-71.)

    C. Utilizing properly included tributary waters, such as Bull Bay and Paddy Bay, the area of Bucket Bend Bay exceeds the area of the hypothetical semicircle, having for its termini, x=2,708,835; y=221,440 and x=2,738,320; y=210,230. (La. Exhs. 26 and 26A; U.S. Exh. 349, Sheet 2, Line AC; Philip Whitaker, tr. 3948-55.)

39. All alternative lines lying seaward of the feder-

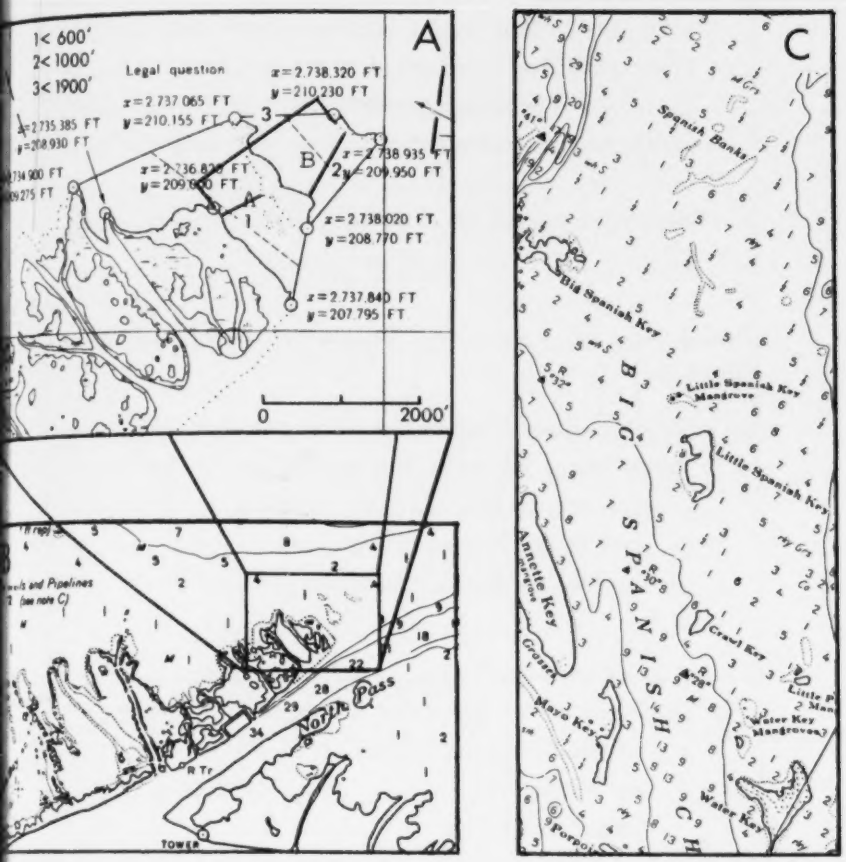

Figure 29. Comparison of distance and water depth facts at North Pass (A & B) with Florida Bay area (C). Scale of A is 1:20,000, while B and C are 1:80,000. (A from U.S. Exh. 349, with markings; B and C are from Charts 1272 and 1251, respectively.)

[Note: Scales indicated have been modified for reproduction of this illustration.]

ally recognized minimum juridical bay extent (Line BE, U.S. Exh. 349) are defined by identifiable points that bear a relationship to the indentation, contain landlocked waters as ascertained from the depth of penetration, and meet semicircle test requirements using properly included tributary waters. (U.S. Exh. 349, Sheet 2; Dr. Melamid, tr. 3270-74; Philip Whitaker, tr. 3948-55.)

From Pass A Loutre to Southeast Pass, Including Blind Bay

40. The mudlump islands and low-water elevations lying along the seaward extension of the Pass a Loutre submarine natural levee are assimilable to, and therefore constitute an integral part of, the mainland for juridical bay delimitation purposes.

    A. Growth of Pass a Loutre has demonstrated a history of mudlump incorporation, as evidenced by the designation of Thomasin Lumps on Map 2 of 8 (U.S. Exh. 374) and current Chart 1272 (La. Exh. 8).

    B. Testimony of Dr. Morgan concerning mudlump origin and distributary progradation charts in the record explain and substantiate this history of incorporation. (La. Exhs. 159, 167, 296—see Figure 30 for reproductions of these charts; La. Exhs. 6 and 10; tr. 338-339, 342-343.)

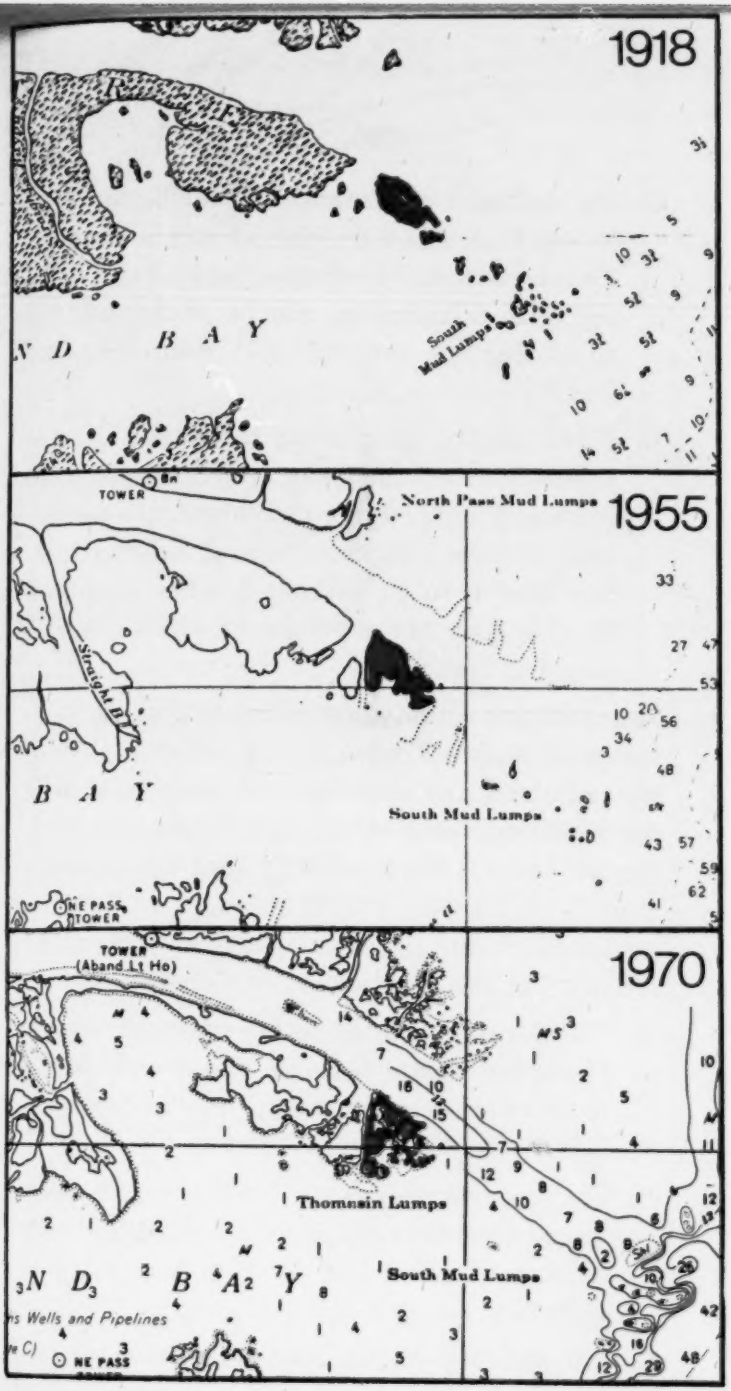

Figure 30. Natural assimilation of mudlump islands through progradation of Pass a Loutre (Chart 1272—editions of 1918, 1955, and 1970.

C. The factual circumstances of mudlump location at Pass a Loutre relate closely to those of *The Anna* case. (*Louisiana Reply Brief*, Figure 80B, following p. 80; La. Exhs. 10, 12, 13-17, 25, 340, and 344; U.S. Exh. 374, Map 2 of 8.)

D. Water depths lying along the Pass a Loutre submarine natural levee, which connects the mainland and offlying mudlumps, are exceedingly shallow and nonnavigable, ranging from less than 1′ to 4′; average depth is less than 2′. (La. Exh. 344, a portion of which is reproduced as Figure 31.)

41. Assuming the validity of Finding 40 that the mudlumps at Pass a Loutre are an integral part of the mainland and assuming the same to be true for mudlumps lying off Southeast Pass (see Finding 16, below), the waterbody enclosed by a line from x=2,751,045; y=181,305 to x=2,726,105; y=148,530 meets all juridical bay requirements of Article 7 of the Territorial Sea Convention.

A. The above-designated points constitute apexes of salient coastal features and are the maximum extensions of the land into the sea. (La. Exh. 8; Dr. Melamid, tr. 3303-04.)

B. The enclosed waters are landlocked, as ascertained from the deep penetration inland in the vicinity of Blind Bay on Map 2 of 8. (U.S. Exh. 374; La. Exh. 353.)

C. The enclosed waters meet semicircle test re-

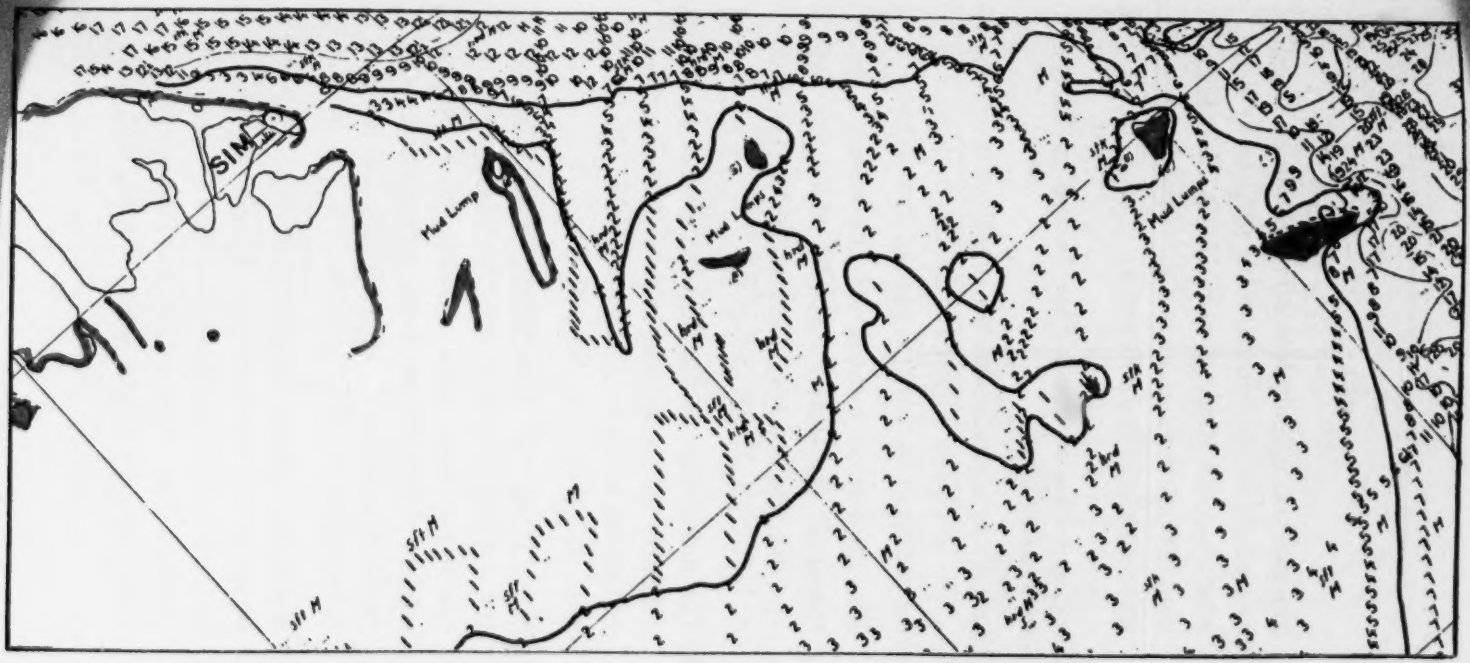

Figure 31. Portion of La. Exh. 344 showing extremely shallow water depths (1 to 4 feet) separating offlying mudlump islands from the mainland and overlying the Pass a Loutre submarine natural levee.

quirements. Although this is obvious by visual inspection of the indentation, figures in Louisiana's 1968 Brief, p. 180, fn. 172, indicate that the bay area exceeds that of the hypothetical semicircle by 1000 acres.

From Southeast Pass to South Pass, Including Garden Island and Redfish Bays

42. The mudlumps located off the mouth of Southeast Pass are so closely aligned with the mainland as to be considered as integral part of that landform.

A. The mudlumps located off the seaward terminus of Southeast Pass lie along the axis and are aligned with that feature. (La. Exh. 8; U.S. Exh. 374-Map 3 of 8.)

B. The mudlumps at Southeast Pass, as at Pass a Loutre and other major delta distributaries, constitute porticos to the mainland. (Dr. Morgan, tr. 350-51; La. Exh. 25.)

C. Were it not for intervening waters between the mudlump islands and the islands and the mainland, they would constitute an integral part of the Southeast Pass natural levee landform. (La. Exhs. 8, 12, and 346; Dr. Morgan, tr. 241.)

D. Mudlump islands at Southeast Pass, as at the other passes, have become incorporated within the natural levee marshland as the pass prograded. See Figure 32 for comparison of charts dated 1838 to 1909 showing this incor-

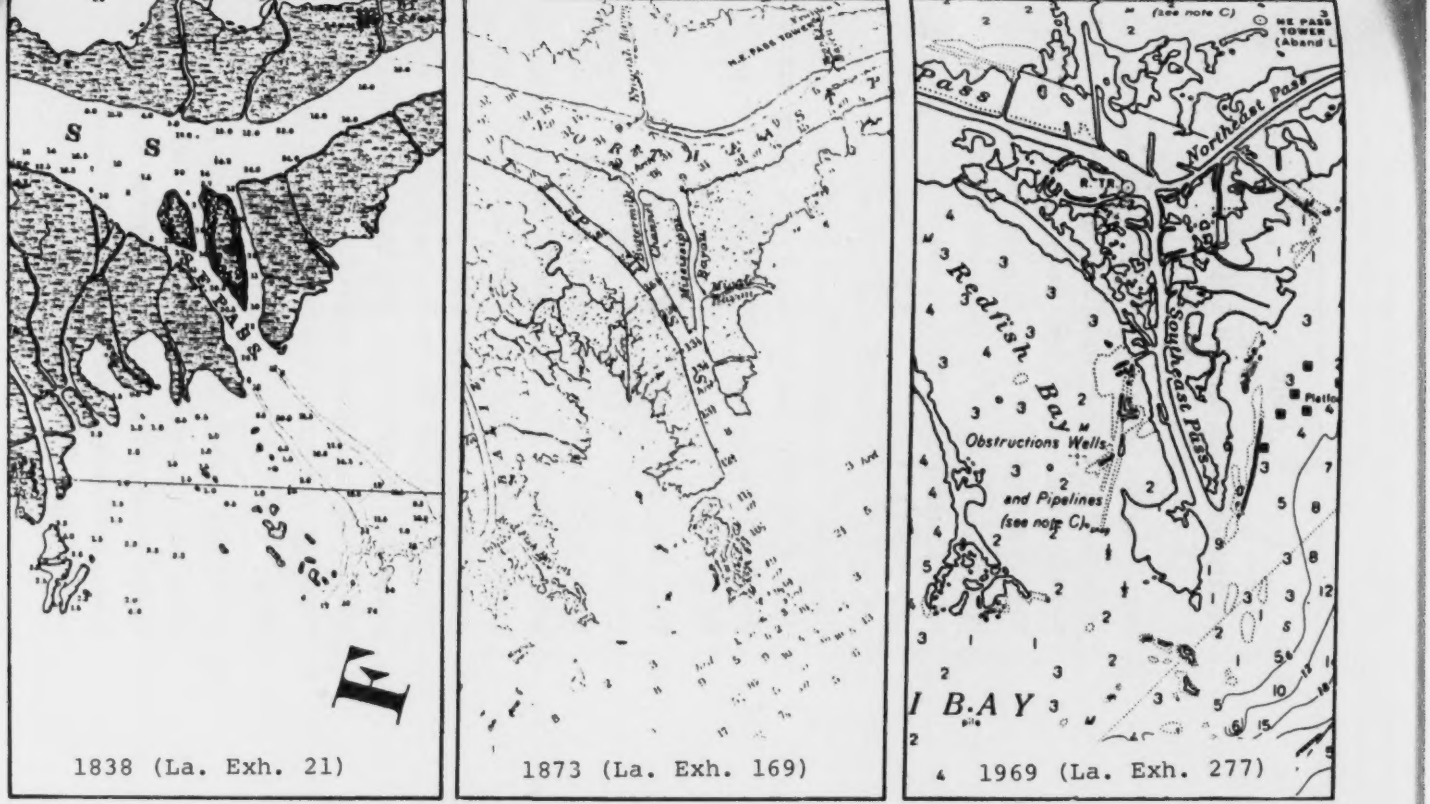

Figure 32. Natural assimilation of mudlumps at Southeast Pass as reflected on nautical charts dated 1838 to 1969.

poration. (La. Exhs. 10 at p. 87, 21, 169, and 277; Dr. Morgan, tr. 338-39.)

E. Water depths lying between the Southeast Pass mainland and off-lying mudlumps are so shallow as to be unnavigable even in small craft. The U.S.C. & G.S. was unable to sound the intervening waters on the latest hydrographic survey, although water depths along the periphery range from ½ to 3 feet. See Figure 33, *infra*, for a comparison of hydrography and planimetric configuration at Southeast Pass. (La. Exh. 340, photo No. 6; La. Exh. 346; James Richardson, tr. 5058-5060; Dr. Morgan tr. 240-242.)

F. The distance between the mainland (at x = 2, 725, 550; y = 153, 430) and the first mudlump off the tip of Southeast Pass is approximately 1600′. The distance to the next mudlump is approximately 530′, and from that mudlump to the outermost is about 1420′. Overall distance from the mainland to the outermost mudlump is less than one statute mile (approximately 5080′). See Figure 34 showing measured distances. (U.S. Exh. 374-Map 3 of 8.)

G. If the Spanish Banks are assimilable to Little Pine Key in the Florida Bay area under principles enunciated by the Supreme Court in prior submerged lands cases, including size and distance from the mainland, (see Special

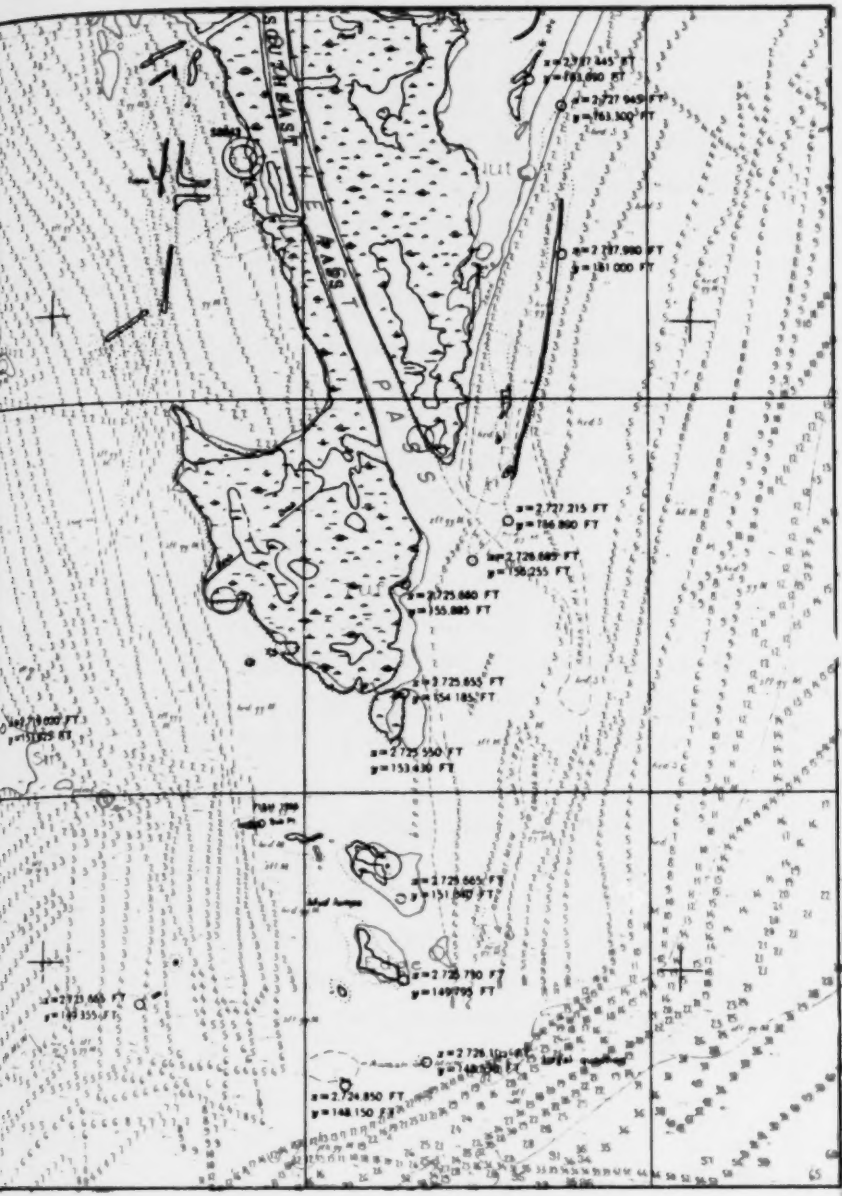

Figure 33. Superimposition of latest hydrographic survey (H-6553 of 1940) on Map 3 of 8 in Southeast Pass area showing extremely shoal water depths between the mainland and offlying mudlumps. (La. Exh. 216 and U.S. Exh. 374.)

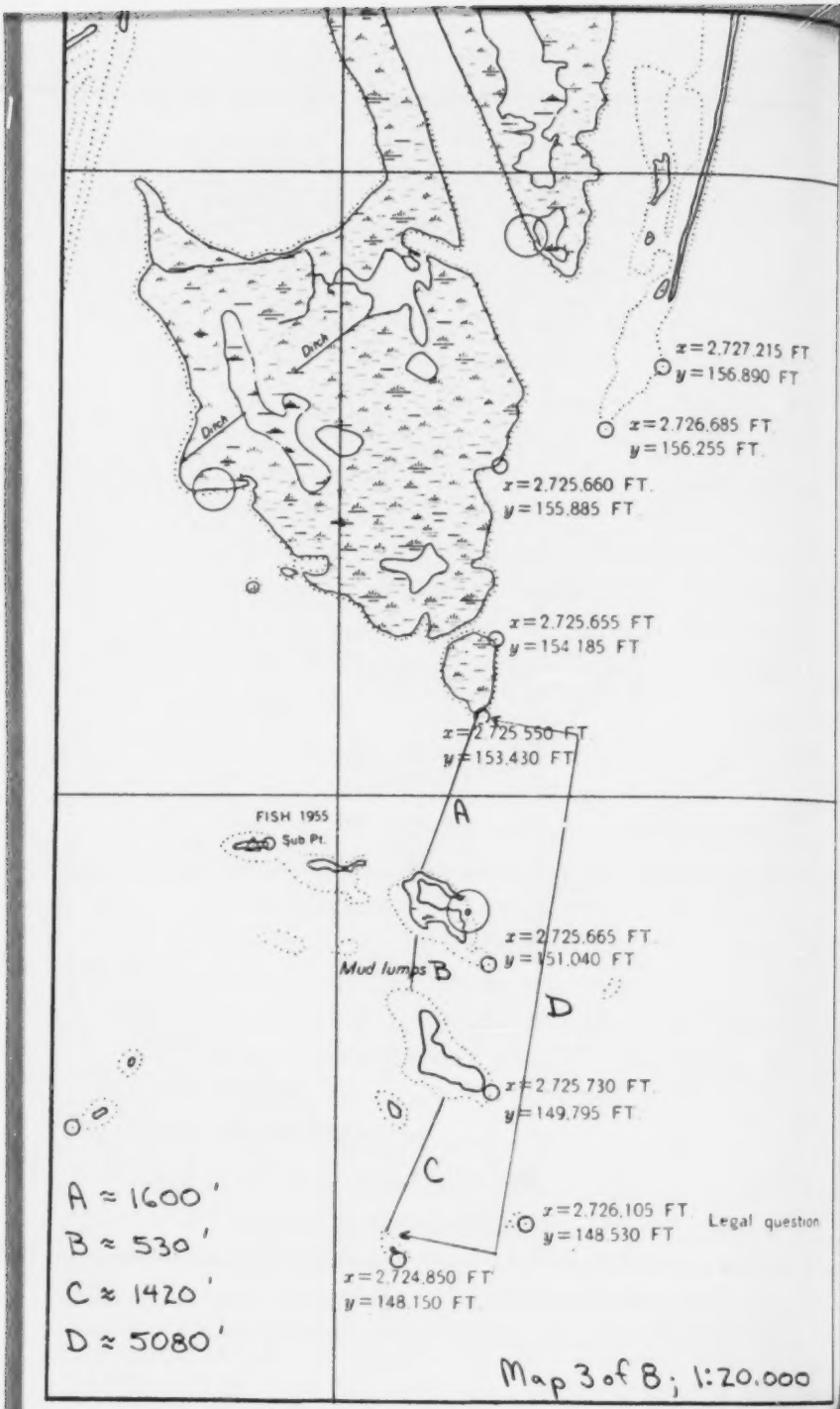

Figure 34. Portion of Map 3 of 8 showing water gap distance data at Southeast Pass mudlumps. (U.S. Exh. 374.)

Master Maris' Report in *United States v. Florida*, No. 52, Original, pp. 38-39 & 46-47), it is inconsistent not to assimilate the Southeast Pass mudlumps to Southeast Pass on the same bases. See Figure 35, *infra*, for a comparison at the same scale.

43. Assuming the mudlumps at Southeast Pass to be assimilable (Finding 42), the waterbody enclosed by a line from x = 2,724,850; y = 148,150 to x = 2,702,461; y = 124,148 meets all juridical bay requirements of Article 7 of the Territorial Sea Convention.

A. The most seaward mudlump off Southeast Pass constitutes the apex of a salient of the coast and the maximum extension of the Southeast Pass landform into the Gulf. (La. Exhs. 8 and 12 [No. 10-13]; Dr. Morgan, tr. 239-241.)

B. The terminus of the eastern jetty at South Pass constitutes the maximum extension of the eastern South Pass levee into the Gulf and is unquestionably the apex of a coastal salient. (Should use of artificial features as headlands be held impermissible, the western levee would so qualify because of accretion attached thereto.) (La. Exh. 8.)

C. The enclosed waterbody is landlocked, as ascertained from its penetration in proportion to width of mouth. (La. Exh. 8.)

D. The enclosed waterbody meets semicircle test

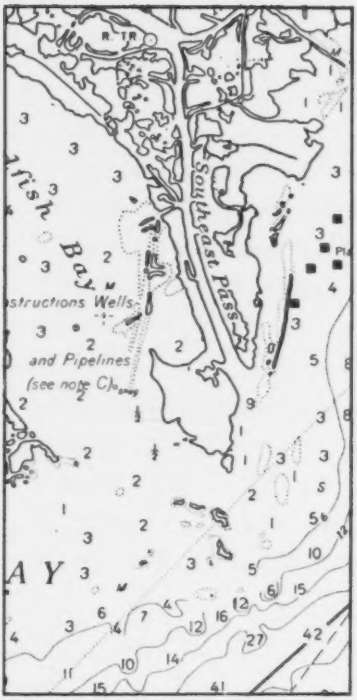

Chart 1272

Naut. Mi.

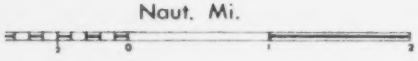

Chart 1251—north is directed downward on the page to facilitate comparison with Southeast Pass.

Figure 35. Comparison of factual situations at Southwest Pass and Florida Bay area. Both illustrations are taken from nautical charts at a scale of 1:80,000. The Spanish Banks were held to be assimilable by Florida's Special Master.

[Note: Southwest Pass in caption should be Southeast Pass. Scale has been modified for reproduction of this illustration.]

requirements. Although inspection of charts in this area unquestionably substantiates this statement, Louisiana's 1968 Brief to the Supreme Court (p. 181, n. 173) verifies that fact, indicating that the waterbody satisfies the test by 9,500 acres.

South Pass

44. Mudlump No. 94, located on Figure 2, p. 8 of La. Exh. 6 (also as La. Exh. 121A), has existed above mean low water from at least January 7, 1954 until present.

A. Mudlump No. 94 was first detected as a submarine feature at -2′ MGL in June and August 1950 (La. Exh. 6, pp. 12 and 59; La. Exh. 10, p. 43).

B. Mudlump No. 94 was detected on aerial photography beginning 1/7/54 near or above water level until January 1961, at which time the Master recognizes its unquestionable existence, and after. See Figure 36. (La. Exh. 121, photographs 5, 6, 8, 9, 10, 11, and 13; Curtis Buttorff, tr. 1989-2029; La. Exh. 184X; *Louisiana Brief*, Vol. VIII, Appendix J.)

C. It is probable that landforms shown at or above water level on photographs taken during photographic daylight in the Mississippi delta area are above mean low-water level. (U.S. Exh. 3; *Louisiana Brief*, Vol. VIII, Appendix J.)

D. Mudlump uplift is most pronounced in the

summer months following spring flood of the Mississippi River, while mudlump degradation by storm and wave action is accentuated in winter months. (La. Exh. 10, pp. 98-99.)

A HISTORY OF A "NON-EXISTENT" MUDLUMP (NO. 94) AS SHOWN ON NUMEROUS AERIAL PHOTOGRAPHS, SURFACE PHOTOGRAPHS AND SURVEYS

Its Submarine History.

8/1950 - first detected as a submarine mudlump (−2′ at MGL) on Corps of Engineers 1″ = 400′ map. La. Exh. 6, p. 12, 59.

Its Subaerial (above water) History.

01/07/54	air photo	724-193	La. Exh. 121	No. 5
02/29/56	air photo	24-116	La. Exh. 121	No. 6
10/11/58	air photo	L6948	La. Exh. 121	No. 8
11/08/59	air photo	144	La. Exh. 121	No. 9
11/30/59	air photo	L8728	La. Exh. 121	No. 10
12/07/59	air photo	L9121	La. Exh. 121	No. 11
10/13/60	air photo	62	La. Exh. 121	No. 13
10/17/61	air photo	112	La. Exh. 121	No. 14
11/23/62	air photo	75	La. Exh. 121	No. 15
11/1964	Morgan photo La. Exh. 12, No. 35, see tr. 271-72.			
11/1964	Morgan photo La. Exh. 12, No. 36, see tr. 272.			
11/1964	Morgan structure map shows 300′, La. Exh. 12, No. 49			

Figure 36. Portion of Appendix J of the *Louisiana Brief* (Vol. VIII, p. 11) reflecting history of Mudlump 94 until 1964, by which time the Master recognizes its unquestioned existence.

E. Although Mr. Buttorff was able to readily identify the existence of Mudlump No. 94 on air photographs taken from 1954 until present, the feature is clearly visible to the naked untrained eye as being above water on U.S. Army Corps of Engineers air photograph 551 X2, taken October 29, 1957. Figure 37, *infra*, is a copy of this photograph overlain by a registered transparency of La. Exh. 121A, identifying mudlumps by the Morgan numbering system. (La. Exh. 6, p. 8; La. Exh. 193C.)

45. Mudlump No. 93 located on La. Exh. 121A (formerly SP-3 in early Morgan publications—La. Exh. 10), was first observed above the water surface in June 1948 and has persisted and increased in size until present. (Dr. Morgan, tr. 2356-57; La. Exh. 6, pp. 7-12; La. Exh. 10. pp. 72-75, 99 fn. 10, and Figure 44 and Plate 4; La. Exh. 121, Photographs 4-23; La. Exh. 11, p. 156; La. Exh. 12; *Louisiana Memorandum Presenting Additional Technical Data and Information Requested by the Special Master at the October 29, 1973 Conference*, photographs following p. 34.)

46. The existence of mudlump islands in the area east and northeast of Mudlumps 92-94 (see La. Exh. 121A) shown on editions of Chart 1272 dated from 3/28/41 until 12/6/69 should be given effect until present in this litigation as these features were shown on official large-scale nau-

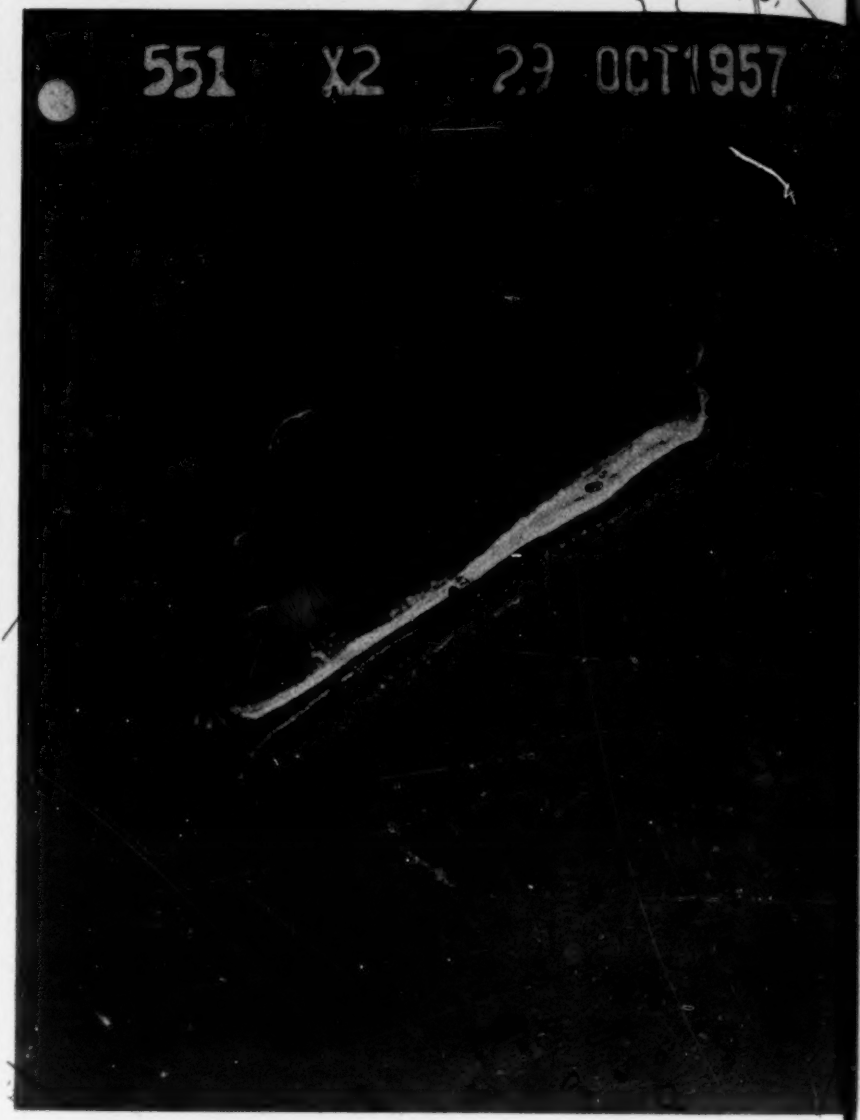

Figure 37. Superimposition of La. Exh. 121A, an overlay showing distribution of mudlumps at South Pass from a Morgan publication (La. Exh. 6), over a 1957 Corps of Engineers aerial photograph (551 X2), which unquestionably shows Mudlump No. 94 as being of considerable areal extent and located above water at that time.

tical charts published by the U.S.C. & G.S. until December 5, 1969, the date upon which the Joint Pretrial Statement was filed with the Special Master in Memphis. On that date the correctness of the Set of 54 Maps was stipulated to, except in a few areas where the chart should control; the South Pass mudlump area was one of these. The additional mudlumps were indicated on Chart 1272 until their removal at request of Federal counsel on the edition dated 12/6/69 (see Finding 29, *supra*, and Figure 38). It certainly should be held that their existence was not reasonably disproved until the date of the Federal resurvey in January/February 1970, if this evidence, obtained at variance with normal charting techniques, is allowed to control. It should be noted that on the latest chart, dated 8/15/70, the area in question is still specially delimited and labeled, "foul with shifting shoals and mud lumps," a near-disclaimer of the 1970 Federal resurvey work. (La. Exhs. 8, 22, 123 at pp. 100-104; 124, 165, 166, 167, 168, 277, and 293.)

47. The existence of mean low-water areas surrounding the mudlumps subject of Finding 46, *supra*, and shown on Chart 1272 on editions dated 12/4/50 until 12/6/69 should be given effect until present by reasoning presented in Finding 46. Alternatively, the low-water line shown on the charts of this period in the area in question should control until the date of the 1970 resurvey. (See Figure 38 and citations contained at Finding 46.)

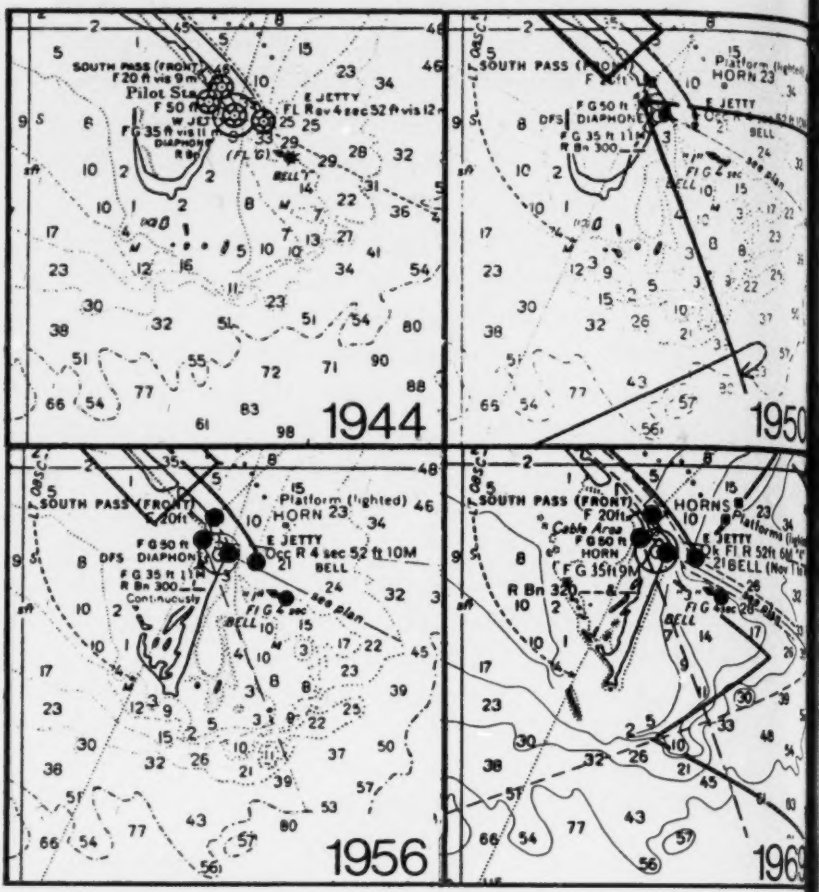

Figure 38. Comparison of various nautical chart configurations showing mudlumps and low-water information at South Pass from 1944 to 1969. (La. Exhs. 22, 165, 167, 168 and 296.)

Southwest Pass to Belle Pass: Ascension Bay

48. Ascension Bay, bounded by the natural levee of the Mississippi on the east and by the natural

COPY BOUND

levee of Bayou Lafourche on the west, is juridically and geographically a bay that has a mouth in excess of 24 miles wide, and a 24-mile line should be drawn within it and used as a baseline.

A. Geographically and geomorphologically, Ascension Bay is a well-marked indentation of the coast, for it is an interdeltaic estuarine basin bounded by two prominent physical features, the natural levees of Bayou Lafourche and of the Mississippi River and Southwest Pass, which clearly mark its sides and mouth. See Figure 39, *infra.* (Dr. Morgan, tr. 146-47; La. Exh. 104.)

B. The Geographer of the Department of State recognized that Ascension Bay is well marked. (Dr. Robert D. Hodgson, tr. 5379.)

C. The well-marked character of Ascension Bay is further shown by the pronounced character of the headlands that mark its mouth which compare favorably to those of Monterey Bay and other recognized bays. See comparisons with Monterey Bay (Figure A-5 of *Louisiana Brief*, Vol. V, Part 5, following p. 18) with an unnamed Alaskan Bay (Figure A-7 of *Louisiana Brief*, Vol. V, Part 5, following p. 20), with Moray Firth (Figure 138A of *Louisiana Reply Brief*), and with Egmont Bay (Figure 139A of *Louisiana Reply Brief*).

D. Cartographic comparisons enumerated in Finding 48.C, *supra*, demonstrate Ascension Bay's

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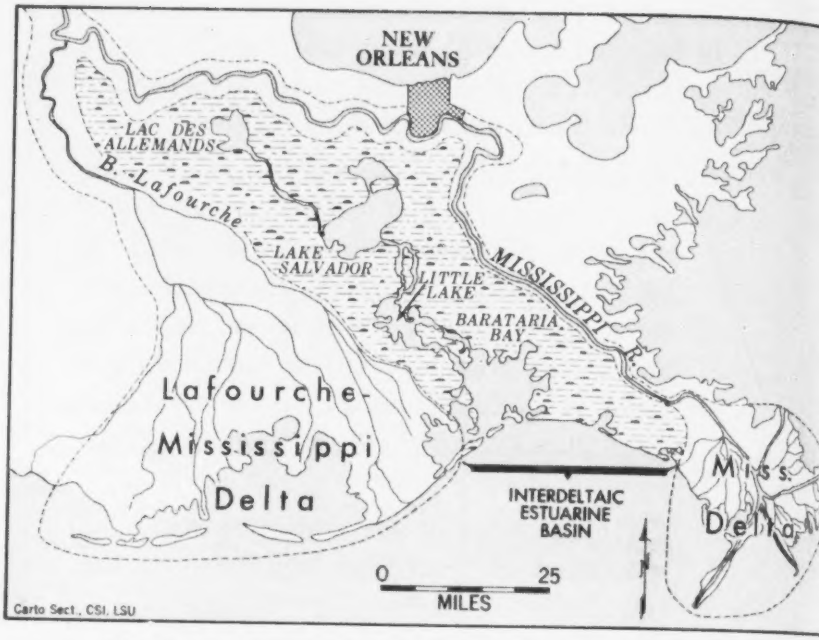

Figure 39. Reproduction of Figure 7 "Interdeltaic basin between two Mississippi River delta systems" from Dr. Morgan's article, "Ephemeral Estuaries of the Deltaic Environment" in *Estuaries* (La. Exh. 324) p. 119.

equivalent or superior landlocked and size/enclosure characteristics. (See also Thames Estuary analysis, *Louisiana Brief*, Vol. V, Part 5, pp. 27-29, and Hawke Bay analysis, *Louisiana Brief*, Vol. V, Part 5, pp. 33-35 including Figure A-14.)

E. The landlocked character of a bay is measurable by a consideration of the depth of penetration of an identation in proportion to the width of its mouth. If a waterbody is land-

locked, it is more than a mere curvature of the coast. (See Article 7 of the Territorial Sea Convention; *North Atlantic Coast Fisheries Arbitration*, [Scott, *The Hague Court Reports* (1916), pp. 183-84—Finding 1.B, *supra*]; La. Exh. 230.)

F. The method of mathematical measurement of depth of penetration in proportion to width of mouth that is most suitable in applying Article 7 is that system which enables measurement to the deepest point of the indentation, since measurement of depth reasonably requires measurement of total depth.

G. Possible mathematical systems of measuring depth of penetration in proportion to width of mouth confirm subjective and graphic impressions that Ascension Bay is landlocked. (David Morgan, tr. 3844-47; La. Exhs. 229 and 237A-C.)

H. As reflected on La. Exh. 229, the depth of penetration in proportion to width of mouth of Ascension Bay is materially greater than Monterey Bay and also compares well with other recognized bays by mathematical measurements.

I. The Shalowitz system of recognizing that an essentially semicircular indentation has sufficient configuration to be a well-marked, landlocked indentation is correct. (1 *Shalowitz* 34-

36; the language of Convention Article 7(2) supports such an analysis,

> An indentation shall not, however, be regarded as a bay unless its area is *as large as*, or larger than, that of *the semicircle* whose diameter is a line drawn across the mouth of that indentation. [Emphasis added.])

J. It is found that Ascension Bay has more than an essentially semicircular configuration and, therefore, materially exceeds minimum requirements. See Figure 40, *infra.*

K. A pronounced pocket exists near the eastern headland of Ascension Bay consisting of West Bay and more interior waters where substantial erosion has taken place and continues to the present. (*Louisiana Brief*, Vol. V, Part 5, pp. 22-23, including Figure A-8; La. Exh. 4, Figures 3-5; Dr. Morgan, tr. 139-41.)

L. The presence of pockets at the sides of an indentation or mouth of an indentation is unnecessary to a finding that the indentation is either well marked or landlocked. (Article 7 of the Convention; see list of V-shaped bays recognized in U.S. Exh. 416-D, in *Louisiana Reply Brief*, Figures 67A and 70A.)

M. The natural entrance points of Ascension Bay are at the mouth of Bayou Lafourche at Belle Pass and the mouth of the Mississippi River

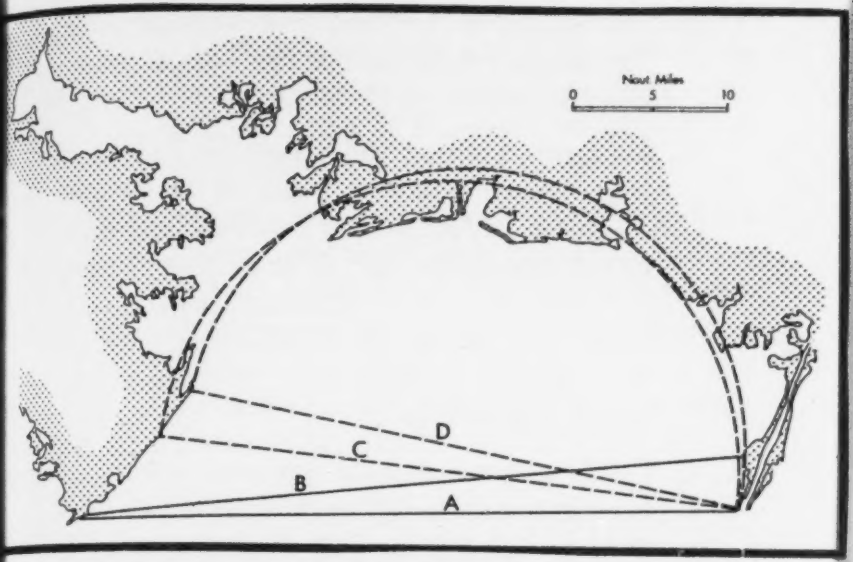

Figure 40. Ascension-Barataria Bay (Figure A-15, *Louisiana Brief*, Vol. V, Part 5, following p. 35) showing locations of two possible overlarge bay closures (C and D) landward of those shown on La. Exh. 104 (A and B). Lines C and D enclose waters even more landlocked than those behind lines A and B and would even more obviously satisfy semicircle test requirements.

at Southwest Pass. (See Figure 40; La. Exh. 104; Dr. Morgan, tr. 2731-32.)

N. If the points mentioned in the preceding finding (48.M) as natural entrance points would not satisfy natural entrance point requirements, other points more inward within the indentation, *e.g.*, at the hump at Southwest Pass, would constitute reasonable natural entrance points of an indentation that would satisfy the semicircle test. (See Figure 40.)

O. The waters of the Barataria Bay-Caminada Bay complex form part of the area of Ascension Bay. (394 U.S. 11, 50-53.)

P. Even not counting the waters of Barataria Bay-Caminada Bay, it would be found that Ascension Bay constitutes a well-marked, landlocked indentation and is more than a mere curvature of the coast which satisfies the semicircle test, especially considering advanced deterioration of West Bay. (Finding 48.K, *supra*; Figure 40.)

Q. Utilizing outer natural entrance points enclosing Ascension Bay by lines from x=2,354,070; y=152,599 to x=2,607,290; y=93,040 or from x=2,354,434; y=153,240 to x=2,615,475; y=113,900, the waterbody thus enclosed exceeds semicircle test requirements, using properly includable tributary waterbodies, by approximately 50,000 to 125,000 acres. (La. Exh. 104, sheet 1; Philip Whitaker, tr. 3966-74, Phillip Larimore, tr. 3547-56; admission of Mr. Charney, tr. 3970.)

R. Findings above that Ascension Bay between its outer or even interior alternative possible headlands is well marked, landlocked, and satisfies semicircle test requirements are based upon use of the maps and surveys in the record. However, there is also much evidence in the record showing that in interior portions of pockets, coves, or bay within Ascension Bay,

there has been much expansion of water areas that would materially add to the area of the bay for consideration of configuration questions. (Finding 48.K, *supra*; Dr. Morgan, tr. 95-96, 139-41.)

S. A 24-mile baseline drawn from the tip of the Empire Canal jetties at x=2,550,402; y=216,-158 to x=2,406,890; y=189,733 is a line which would enclose the maximum extent of inland waters as prescribed by Article 7(5) and said line should be used for projection of the three-mile belt. (La. Exh. 104.)

West Bay to Pass Tante Phine

49. As discussed under Finding 46, *supra*, at South Pass, the effect of landforms shown on various editions of Chart 1272 dated from 4/1/44 to 12/6/69 (Figure 41, *infra*) should control in this litigation, as the features continued to be carried until and after the stipulation to accept the correctness of the Set of 54 Maps on December 5, 1969. In the absence of stipulation to the contrary, such as in the subject areas, large-scale charts published by the U.S.C. & G.S. should control. Certainly, these features should be given effect for three-mile projections until the date of the 1970 Federal resurvey, when the existence of these features was purportedly disproved. (La. Exhs. 165, 166, 167, 168, 8, 277, 124; La. Exhs. 22 & 23; U.S. Exh. 200; *Louisiana Reply Brief*, pp. 140-149, particularly Figure 149A.)

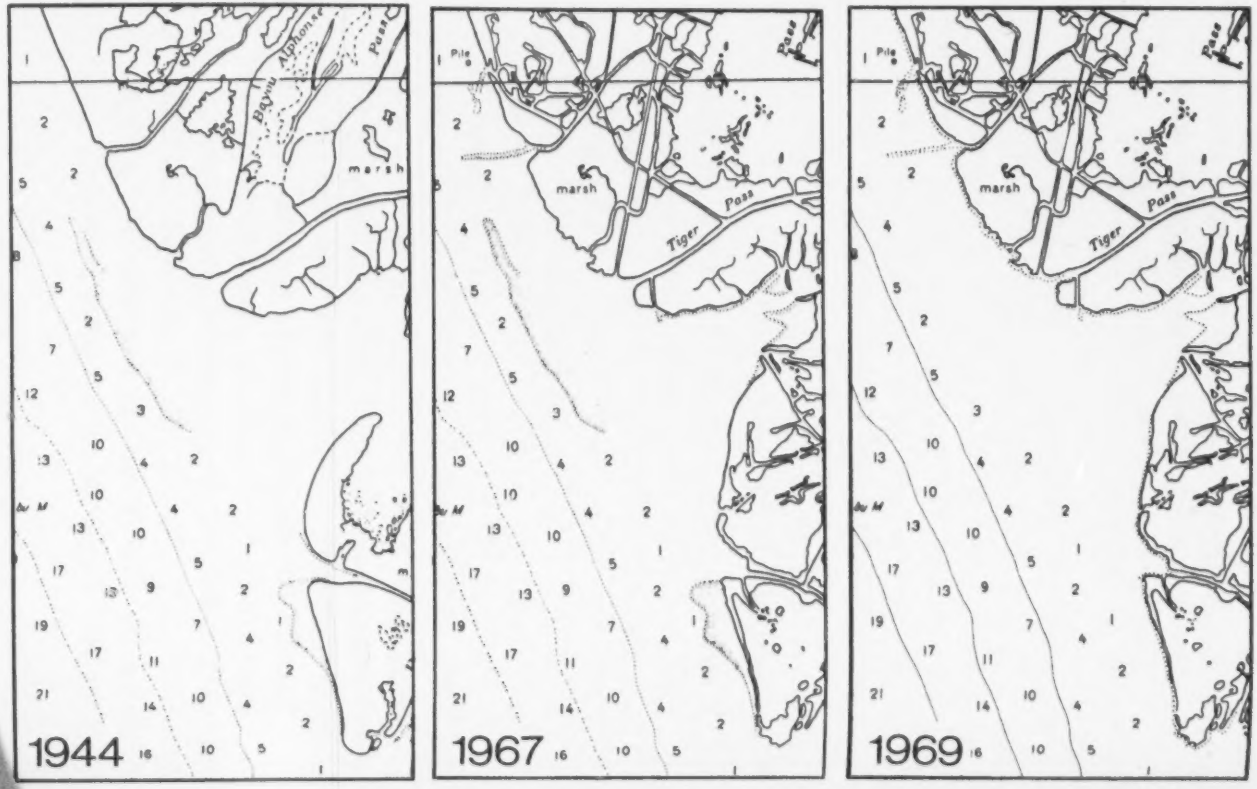

Figure 41. Comparison of West Bay/Pass Tante Phine area on Chart 1272 editions dated 4/1/44 to 12.6.69. Note that even after 12.6.69, various landforms at the mouth of Pass Tante Phine

50. Should the Master deny Finding 49, *supra*, and allow the Federal resurvey to control and to be applied retroactively to 12/6/69 despite the lack of thorough hydrographic sounding work typical of charting surveys, Louisiana is, at a minimum, entitled to three-mile projections from the features in question until 12/6/69. (La. Exhs. 124 & 277.)

Caillou Bay

51. Caillou Bay is a well-marked indentation which has been recognized as a bay in the geographic sense since earliest cartographic documentation.

A. The Gauld map based upon surveys from 1764 to 1771 shows Caillou Bay (unnamed) as a pronounced indentation of the coast. (La. Exh. 247.)

B. The Connely field notes of 1838, which formed a basis for the first official land survey in the Caillou Bay area, refers to "Caillou Bay" and "Derniere Isle," or "Last Island." (La. Exh. 171.)

C. From at least 1842 until present, the area claimed by Louisiana as juridical Caillou Bay was designated by that name on maps and charts published by Federal, State and private entities. (La. Exhs. 196, 157, 135, 215, 186, 274, 256-A-D, 207, 258, 268, 270, 50; U.S. Exhs. 347, 374.)

D. The designation "Caillou Bay" has remained

on official U.S.C. & G.S. charts despite segmentation of Isle Derniere. (La. Exh. 50.)

E. Maps 19-22 of 41 of the Set of 54 Maps, made for purposes of this litigation, indicate Caillou Bay's existence (by designation on those maps at least as a geographic entity, from Isle Derniere to the northern mainland shore just east of Taylor's Bayou. (U.S. Exh. 374.)

F. If the configuration of Caillou Bay had become sufficiently un-bay like over its cartographic history to destroy its geographic character as a bay, the name would have been removed from the official charts under present charting practices of the U.S.C. & G.S. as follows:

> A geographic name is applied to a particular feature which has identity. If the feature ceases to exist, the name becomes meaningless and is removed from the charts. 2 *Shalowitz* 321.

52. The geographic entity "Caillou Bay" has had an extent approximating Louisiana's juridical bay claim in that area over the cartographic history of the bay, provided that the following procedure was used in placement of the bay nomenclature on the various maps and charts published by agencies of the Federal government.

> The placement of geographic names on nautical charts (this also applies to the

topographic and hydrographic surveys) follows well-established cartographic principles. . . . [T]he name of a feature which covers a considerable area, such as an island or a bay, is placed in the approximate center of the area, where possible, and is curved to follow the general configuration of the feature. (2 *Shalowitz* 321.)

A. Placement of the nomenclature "Caillou Bay" on the Hughes Military Reconaissance map (U.S. Exh. 347) implies a bay extent similar to that claimed on a juridical basis by Louisiana (La. Exh. 198), assuming the principle stated above.

B. Placement of the name "Caillou Bay" on the 1932 edition of U.S.C. & G.S. Chart 198 reflects a geographic extent compatible with the extent of Louisiana's juridical bay claim in this proceeding, assuming the principle stated above. (La. Exhs. 268 and 198.)

C. Placement of the name "Caillou Bay" on the latest Chart 1275 submitted in this proceeding (6/27/70) indicates a geographical extent of Caillou Bay at least as large as Louisiana's minimum alternative claim in the area, assuming the principle stated above. (La. Exhs. 50 and 198.)

53. Additional land areas defined and delimited by Louisiana expert witnesses on La. Exh. 300 and not shown on the Set of 54 Maps were in existence,

at least above the mean low water datum, at the time that the official 1954 Ammann photography was taken. These areas, lying landward of inland water closures formerly recognized by the Federal government at Caillou Bay and landward of the termination of low-water line information on the Set of 54 Maps, are not contrary to the stipulation in the Joint Pretrial Statement (Part B) and should be given effect in delimiting Louisiana's coastline in this area.

A. Under the Joint Pretrial Statement the parties have a right to show "inland portions of water lines left incomplete on the Set of 54 Maps" provided that additional evidence is "not inconsistent with those maps." (Joint Pretrial Statement, p. 11.)

B. The United States Justice Department recognized closures between headlands located on the seaward side of the Isle Derniere segments from at least 1950 (Chapman Line) until August 1968 (U.S. Exhs. 116 and 117 at p. 3; La. Exh. 178 at pp. 1-2, 8, 19-20, 55-56, 76, 96; *Motion by the United States for Entry of a Supplemental Decree and Memorandum in Support of the Motion of the United States and in Opposition to the Motion of the State of Louisiana*, at p. 21-22; *Brief for the United States on Cross Motions for the Entry of a Supplemental Decree as to the State of Louisiana (No. 2)*, at p. 89-90.)

C. The Federal government specifically recognized the following closures on the Set of 54 Maps:

From:	To:
x = 2,134,210 y = 136,726	x = 2,138,231 y = 136,387
x = 2,148,929 y = 136,962	x = 2,157,920 y = 135,521
x = 2,162,430 y = 135,112	x = 2,163,266 y = 135,182
x = 2,171,989 y = 136,334	x = 2,179,937 y = 135,695

(1968 United States Motion at p. 21-22; La. Exh. 300).

D. 1954 Ammann International aerial photography was utilized exclusively in the Isle Dernière/Caillou Bay area as a direct basis for the Set of 54 Maps (U.S. Exh. 10 [p. 3], 14, 20 [p. 2], 21, 30 [pp. 2-3 and p. 5].)

E. U.S. Exhs. 257 and 258 and La. Exhs. 302-320 are true and accurate copies of the 1954 Ammann photography which was utilized to ascertain the low-water line along the outer shore of Isle Derniere. (See also La. Exh. 333.)

F. The insular features and additional land areas lying behind island segments interpreted by Mr. Curtis Buttorff, which are shown on La. Exh. 300 (cross-hatched areas), are plainly

visible on U.S. Exhs. 258-259. These areas lie landward of the closures designated in Finding 53.C, *supra*, and are not inconsistent with low-water line information provided on Maps 19 and 20 of 41.

G. The features referred to in Finding 53.F, *supra*, and shown cross-hatched on La. Exh. 300 are at least above mean low water and probably represent islands (above high water). (La. Exhs. 327, 332, 333, 334; Curtis Buttorff, tr. 5868-79 and 5930-41; U.S. Exhs. 417-18, p. 20-22.)

H. Except to show low-water lines felt incomplete on the Set of 54 Maps, evidence offered attempting to show island configurations based upon survey information later than the dates upon which the official Ammann photography was taken (post 1954) is inadmissible. Such information would be contrary to the stipulation outlined in Finding 53.A, *supra*, unless the express purpose of such evidence is to show the character of the area and not to depart from the low-water line portrayed on the Set of 54 Maps.

* * * * *

Louisiana requests the following group of findings (Findings 54 through 57) as a primary request. Should the Master feel compelled by the 1969 Supreme Court Opinion (394 U.S. 11, 67 n. 88) to deny or respond negatively to these findings, Louisiana respect-

fully requests, in the alternative, that the Master respond to Findings 58 through 61, *infra*.

* * * * *

54. On the basis of evidence in the record now before the Special Master, the various segments of Isle Derniere should be assimilated to the mainland under the criteria enunciated by the Supreme Court for purposes of delimiting juridical Caillou Bay.

A. Early charts and maps of the Caillou Bay/Isle Derniere region show considerable north-south continuity between the mainland and the island, both at the vicinity of Caillou Boca and to the east. (La. Exhs. 247, 196, 157, 135, 151, 274, 256, 258, 268, 185-B; U.S. Exh. 374; *Louisiana Memorandum Presenting Additional Technical Data and Information Requested by the Special Master at the October 29, 1973 Conference*, Figure 158-A, following p. 54—reproduced *infra* as Figure 42.)

B. Caillou Boca has been in existence (although of lesser extent formerly) since at least 1842. No map in the record showing the existence of Caillou Boca has failed to show the existence of a geographic feature designated "Caillou Bay." (La. Exhs. 196, 157, 135, 215, 186, 374, 256 A-D, 207, 258, 268, 203, 270, 50; U.S. Exhs. 347, 374.)

C. Caillou Boca has evidenced a shallowing trend;

Figure 42. Comparison of maps of the Caillou Bay area dated 1853-1932 showing high degree of connexity between the mainland and Isle Derniere. Also note unbroken configuration of the island. (*Louisiana Reply Brief*, Figure 158A.)

between 1890 and 1934, depths decreased approximately 6 feet. (U.S. Exh. 202, at p. 56.)

D. Neither Caillou Bay nor Caillou Boca provides a transportation route for other than local boat traffic. No boat drawing more than 5 feet of water could traverse Caillou Bay. (U.S. Exh. 191; La. Exh. 50; James Richardson, tr. 5085.)

E. Caillou Boca cannot be considered a "route of passage between two areas of open sea" or "a useful route for international passage" as discussed in the *California* case (381 U.S. 139, 171-172). At most, the feature has utility only as a strait leading from inland waters (Bayou Grand Caillou and Caillou Bay) to inland waters (Caillou Boca/Lake Pelto/Timbalier-Terrebonne Bay). The Federal government's recognition of this fact is manifested in its closure across Caillou Boca for the bay complex to the east. (U.S. Exh. 416-D, Chart 1274; U.S. Exh. 257; La. Exhs. 50, 198, 321 and 322; Dr. Morgan, tr. 2841.)

F. Isle Derniere remained virtually unbroken as reflected on surveys from 1771 until 1934. U.S.C. & G.S. surveys T-5291 and T-5292 indicate the first substantial segmentation of the island based upon evidence in the record. (La. Exhs. 247, 171, 196, 157, 135, 215, 208, 209, 186, 256-A-D, 274, 207, 258, 268, 202; 203; U.S. Exh. 247.)

G. The configuration of the openings has changed since the 1934 surveys, with water depths within the opening shoaling considerably. (Compare Illustration E [1938] with Illustration F [1970] of *Memorandum for the United States in Support of Oral Argument before the Special Master*, pp. 25-26). Present (6/27/70) water depths of 1 to 4 feet compare with depths of 12 to 15 feet in 1938. (La. Exh. 50.)

H. The present configuration of the western Isle Derniere segments (assuming either the Set of 54 Maps or La. Exh. 300 configuration to be correct) displays a flowing continuity with the segments to the east, which continuity reflects the former (pre-segmentation) shape evidenced in 1934 (Chart 198). Were it not for the intervening water gaps, the western segments would be part of the Isle Derniere formation. (La. Exhs. 268, 300; U.S. Exh. 374.)

I. Isle Derniere is the product of marine reworking of former fluvial/deltaic deposits of the Mississippi River. These deposits, which comprise the mainland marshes to the north, underlie portions of all segments of the island as evidenced by Figure 14 of U.S. Exh. 202. (U.S. Exh. 202, at pp. 32 & 33; Dr. Morgan, tr. 2840-41; La. Exh. 181.)

J. Based upon the Isle Derniere configuration shown on *La. Exh.* 300, which includes addi-

tional land areas as interpreted from the 1954 Ammann photography, the area of the island segments constitutes approximately 83.5% of the combined area of islands and intervening water gaps *south of the north bank of Caillou Boca*. In each case, the area of the island being considered exceeds that of the intervening water gap. (Ratios vary from 1.20:1 to 81.40:1.) (La. Exhs. 300 & 331.) (Note: underscoring to differentiate parameters, not for emphasis, Findings 54. J to P.)

K. Based upon the Isle Derniere configuration shown on *La. Exh. 300*, the ratios of the lengths of islands to intervening water gaps *from a point north of Caillou Boca* range from 2.15:1 to 16.52:1. Comparing total *length* of island segments (50,100 feet) with total of intervening water gaps (7,500 feet) gives an overall ratio of 6.68:1. The islands therefore comprise approximately 87% of the total island/water gap length. (La. Exh. 300.)

L. Based upon the Isle Derniere configuration shown on *La. Exh. 300*, the islands *west of the central island segment* comprise about 92% of the total island/water gap *area*. (La. Exhs. 300 & 331; *Louisiana Brief*, Vol. V, Part 6, Figure C-2—Island Assimilation Data table.)

M. Based upon the Isle Derniere configuration shown on *La. Exh. 300*, the islands *west of*

the central island segment comprise approximately 89% of the total island/water gap *length*. (La. Exh. 300; *Louisiana Brief*, Vol. V, Part 6, Figure C-2—Island Assimilation Data table.)

N. Based upon the Isle Derniere configuration reflected on Maps 19 and 20 of 41 of the Set of 54 Maps, the ratios of the lengths of islands to intervening water gaps from the northern bank of Caillou Boca to Raccoon Point ranges from 1.97:1 to 18.52:1. Comparing combined island length (48,800 feet) with combined water gap length (10,700 feet) gives an overall ratio of 4.56:1. The islands therefore comprise approximately 82% of the total island/water gap length. (La. Exh. 188A).

O. Based upon the Isle Derniere configuration reflected on Maps 19 and 20 of 41 of the *Set of 54 Maps*, the islands *west of the central island segment* constitute approximately 81% of the total island/water gap *length*. (La. Exh. 188A; *Louisiana Brief*, Vol. V, Part 6 Figure C-2—Island Assimilation Data table.)

P. *Federal measurements* for Finding 54.0, *supra*, yield a figure of 78% for aggergate island *length* compared to total island/water gap length *west of the central island segment* (R.B. Southard, tr. 5202; U.S. Exh. 355A.)

Q. Assuming that the federally proposed 50% "test" for island assimilation bears any valid-

ity, the western segments of Isle Derniere would be assimilated to the mainland based upon that test alone.

55. Comparison of island assimilation facts for Isle Derniere segments at Caillou Bay with assimilation facts for the Florida Keys at Florida Bay from the *Report of Albert B. Maris, Special Master* (*United States v. Florida*, No. 52, Original, filed January 18, 1974) indicates that based upon far less favorable facts, the various Florida Keys were assimilated, while with a much stronger case at Caillou Bay assimilation, Louisiana claims were rejected. The segments of Isle Derniere should accordingly be assimilated to preclude unequal treatment of equal states.

A. The following criteria enunciated in Supreme Court decisions were cited as having a bearing on island assimilation problems:

a) Sufficiency of enclosure by islands (363 U.S. 1, 66-67, fn. 108)

b) Shallowness and lack of navigability of enclosed waters (381 U.S. 139, 170-171)

c) Alignment with or ties to the mainland as determined by

(1) origin of islands and resultant connection with mainland
(2) size
(3) distance from mainland

(4) depth and utility of intervening waters
(5) shape of island
(6) relationship of island to configuration or curvature of the coast. (394 U.S. 11, 60-66, fn. 83 & 84).

(Maris Report, p. 39.)

B. In applying the factors outlined in Finding 55.A, *supra*, Judge Maris held that not all the above conditions must be met simultaneously in order to assimilate islands (Maris Report, pp. 46-47). This is contrary to Special Master Armstrong's tentative draft findings (Tentative draft, p. 45).

C. The Maris interpretation is supported by the Supreme Court's language:

> While there is little objective guidance on this question to be found in international law, the question whether a particular island is to be treated as part of the mainland would depend on such factors as its size, its distance from the mainland, the depth and utility of the intervening waters, the shape of the island, and its relationship to the configuration or curvature of the coast.[86] We leave to the Special Master the task of determining in the first instance—*in the light of these and any other relevant criteria* and any evi-

[86] *This enumeration is intended to be illustrative* rather than exhaustive. (394 U.S. 11, 66; emphasis added.)

dence he finds it helpful to consider—whether the islands which Louisiana has designated as headlands of bays are so integrally related to the mainland that they are realistically parts of the "coast" within the meaning of the Convention on the Territorial Sea and the Contiguous Zone.

D. Judge Maris held that channels of 1.9 to 2.2 geographic miles in width containing water depths of 7 to 13 feet did not defeat assimilation of certain keys to the mainland. (Maris Report, pp. 54 & 95.)

E. The breaks in Isle Derniere west of the central island segment are 0.2 and 1.1 geographic miles in width and contain water depths of 1/2 to 4 feet. (La. Exh. 50.)

F. The shallow waters of Florida Bay, deemed to be internal waters by Judge Maris, range up to 13 feet in depth (except for non-continuous tidal channels). Those in Caillou Bay range up to 7 feet in depth (except for non-continuous tidal channels). (La. Exh. 50; Maris Report, p. 95.)

G. One of a group of small low-water elevations at Spanish Banks, lying a minimum of .87 geographic miles and an average of 1.5 geographic miles from the nearest land above MHW (Big Spanish Key), was assimilated by Judge Maris for use in delimiting a potential 24-mile baseline. Surrounding water is quite

shallow. See Figures 29 and 35, *supra*. (Maris Report, pp. 46-47.)

H. Although the system of straight baselines was specifically refuted along the Florida coast, Judge Maris held that the coast line (baseline) around the island groups of the lower Florida Keys, the Marquesas Keys and the Dry Tortugas should be drawn between outer islands and low-tide elevations of the groups, thus enclosing inland waters of the State of Florida. See Figure 15, *supra*, showing similar treatment at the Florida Keys by the Department of Commerce in the 1940 Census. (Maris Report, pp. 52, 53, and 55; La. Exh. 52(1).)

I. The Master's Report negated the Federal government's argument that assimilation of the lower keys to the mainland might be justified because they are joined to the mainland by a highway (394 U.S. 11, at 72, fn. 95).

a) Closures between the keys follow the seawardmost natural entrances of the islands, some of which are not even connected by the highway. (Maris Report, p. 95 — see closures at Indian Key Channel.)

b) The highway extends to Key West, while the area lying west of Knight Key was specifically held not to be assimilable. The highway was not discussed as a factor to be considered in such assimilation, although geologic connection was considered. (Maris Report, pp. 47 & 97.)

56. The waterbody enclosed by a line from x=2,117,-317; y=143,491 to x=2,076,201; y=189,799 meets all juridical bay requirements under Article 7 of the Territorial Sea Convention, assuming that Isle Derniere constitutes an integral part of the mainland (Finding 54, *supra*). See Figure 43.

A. The point on the low-water line of the westernmost Isle Derniere segment known as Raccoon Point at:

x=2,117,317
y= 143,491

constitutes an identifiable point, being the apex of a salient and the maximum seaward extension of the shoreline of Isle Derniere. (Dr. Melamid, p. 3278; La. Exh. 181D.)

B. The point on the low-water line of Caillou Bay's northern periphery at:

x=2,076,201
y= 189,799

is an identifiable point on the shore at which there is an appreciable change in the direction of the general trend of the coast. This point is verified by bisecting the angle formed by generalizing the bay shore and the Gulf shore seaward of the headland landform. (Dr. Melamid, tr. 3278; La. Exh. 181D; *Louisiana Brief*, Vol. V, Part 6, Figure C-11.)

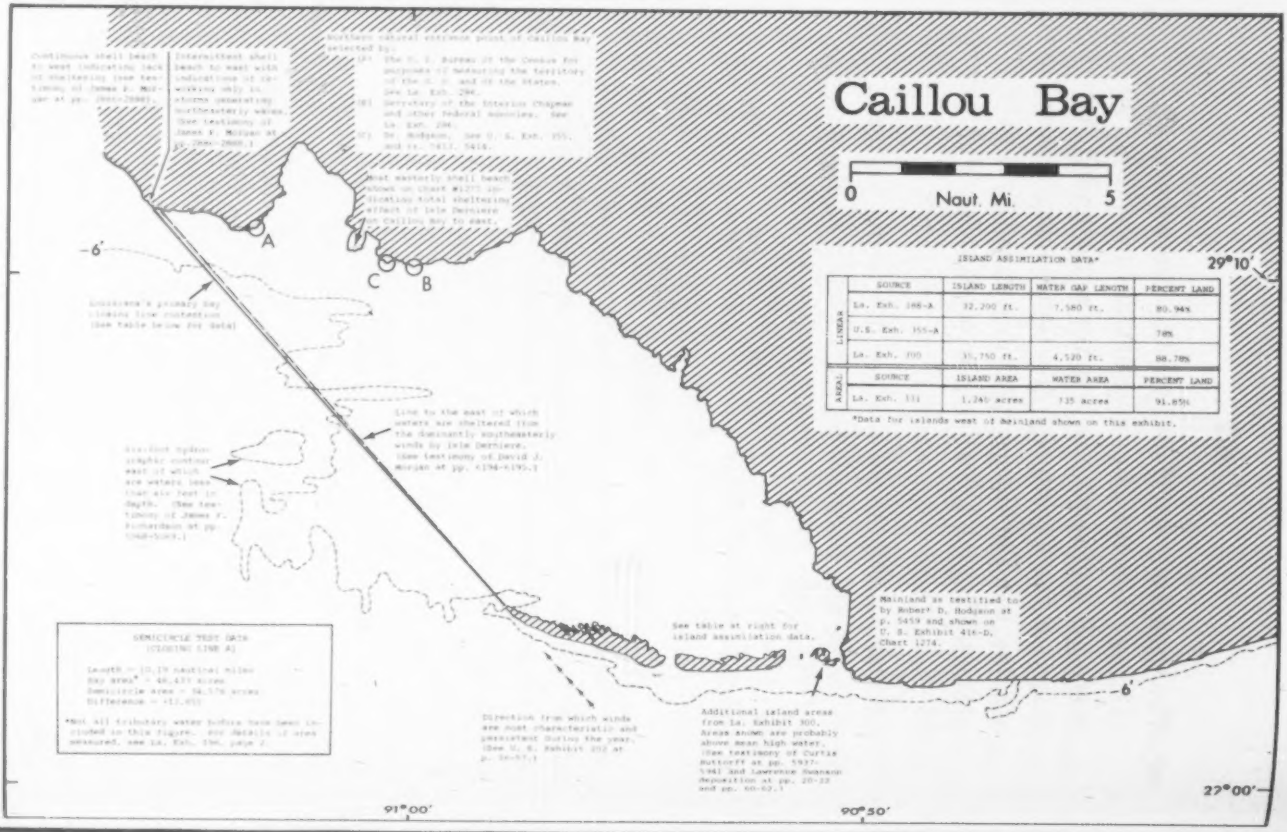

Figure 43. Partial Summary of Caillou Bay Evidence. Figure C-2 from *Louisiana Brief*, Volume V, Part 6, following page 8.

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C. This point (x=2,076,201; y=189,799) is the outermost point which bears a relationship to the geographic characteristics and configuration of Caillou Bay. (D. J. Morgan, tr. 6191-6203; U.S. Exh. 386; La. Exh. 339.)

D. A line connecting the above-designated points and shown on La. Exh. 198 as Closing Line A encloses landlocked waters based upon the penetration in proportion to width of mouth [assuming Isle Derniere forms the southern periphery of Caillou Bay]. (La. Exhs. 198, 229, and 232.)

E. The closure described in Finding 56.D, *supra*, designated A on La. Exh. 198, encloses sufficient bay water area to meet semicircle test requirements under even the most conservative bay area delimitation. (La. Exh. 198; Philip Whitaker, tr. 3985-87.)

F. The area lying landward of Closure A is sheltered from the dominant southeasterly winds by Isle Derniere. This characteristic is reflected by the paucity of shell beaches to the east of Louisiana's primary northern headland location near Bayou Goreau and their prevalence to the west. (Dr. Morgan, tr. 2835-38 and 2886-88; D. J. Morgan, tr. 6194-95; La. Exhs. 50, 198; U. S. Exh. 202, p. 56 and Figure 24, p. 57; *Louisiana Brief*, Vol. V, Part 6, Figure C-2.)

G. Closure A roughly parallels the 6-foot hydro-

graphic contour; waters lying landward are dominantly less than 6 feet. Average water depth for the bay appears on Chart 1275 to be about 4 feet. Such shallow water depths have a tendency to dissipate wave energy in the absence of actual land above water. (U.S. Exh. 202, Figure 19, p. 45; D. J. Morgan, tr. 6194-95; La. Exh. 50.)

57. Louisiana's alternative Caillou Bay closing lines designated as X, Y, and Z of La. Exh. 198 meet all juridical bay requirements under Article 7 of the Territorial Sea Convention.

A. Points on the low-water line of the northern shore of Caillou Bay at the following coordinates constitute identifiable points on landforms which bear a relationship to the indentation:

x=2,085,370
y= 187,372

x=2,098,954
y= 185,105

x=2,106,412
y= 183,216

(La. Exhs. 50 & 198.)

B. Louisiana's alternative closures at Caillou Bay (designated X, Y, and Z on sheet 2 of La. Exh. 198) all delimit landlocked waters based upon the penetration in proportion to width of mouth [assuming that Isle Derniere forms the

southern periphery of Caillou Bay]. (La. Exh. 198.)

C. Louisiana's alternative closures at Caillou Bay (designated X, Y, and Z on sheet 2 of La. Exh. 198) all meet semicircle test requirements based upon conservative planimetry techniques. (La. Exh. 198; Philip Whitaker, tr. 3985-91.)

* * * * *

The Supreme Court, in its reference to appointment of a Special Master, directed that his findings should be consistent with its opinion (394 U.S. 11, 78). The findings rejecting Louisiana's claims that Caillou Bay is a juridical bay have been accordingly based on an appreciation of the Supreme Court's ruling as to that area (394 U.S. 11, 67 n. 88). If the Supreme Court does not agree that the Master was compelled to reach the findings and conclusions rejecting Caillou Bay's status as a juridical bay because of this footnote, then the Special Master is requested to respond to Louisiana's requested Findings 58 through 61, *infra*, which correspond to Findings 54-57, *supra*.

* * * * *

58. See Finding 54, *supra*.

59. See Finding 55, *supra*.

60. See Finding 56, *supra*.

61. See Finding 57, *supra*.

62. In the event that the Isle Dernire assimilation question is answered negatively (Finding 54 or 58,

supra), the segments of the island may be treated as screening islands lying at the mouth of a bay. The bay thus delimited meets all requirements of Article 7 of the Territorial Sea Convention.

A. The indentation delimited without use of the western Isle Derniere segments constitutes a sufficiently landlocked and well-marked feature, as ascertained by comparison with Biscayne Bay, Florida, delimited in U.S. Exhibit 416-D, to qualify as "more than a mere curvature of the coast" under the Territorial Sea Convention (*Louisiana Brief*, Vol. V, Part 6, Figure C-5, following p. 27; La. Exh. 154, p. 212—quote from G. E. Pearcy, Geographer of the State Department,

> The keys along the southern coast of Florida opposite and south of Miami give Biscayne Bay a number of mouths and account for its status as a body of internal water. Without these keys it would be little more than an elongated, irregular indentation in the coast.

B. Closing lines from the vicinity of either of the following points at the western terminus of the central Isle Derniere segment:

x=2,157,920	or	x=2,156,802
y= 135,521		y= 137,007

to a point on the north shore of Caillou Bay at:

x=2,076,201
y= 189,799

intersect islands lying to the west of the central island segment shown on La. Exh. 300. (La. Exh. 300; *Louisiana Brief*, Vol. V, Part 6, Figure C-2A, following p. 27.)

C. A closing line from a point on the western terminus of the central island segment to each consecutive island segment in the Isle Derniere chain westward and from Raccoon Point at

x=2,117,317	to	x=2,076,201
y= 143,491		y= 189,799

on the northern mainland shore meets semicircle test requirements under the most conservative water area measurement technique, as follows:

Summation of water gaps from La. Exh. 300: 250 + 120 + 2,970 +1,180 = 4,520 ft. = 0.74 na. mi. Total length of closure (Line A, La. Exh. 198 + above):

10.19 + 0.74 = 10.93 na. mi. = 12.59 stat. mi.

Hypothetical semicircle ($A = \frac{1}{2}\ 11\ r^2$)

$\frac{12.59}{2}\ 2 \times 1.5708 = 62.23$ sq. stat. mi. =

39,827 acres

Planimetered bay area (La. Exh. 198, sheet 2):

48,433 acres

Difference:

+8,606 acres, therefore meets semicircle test.

D. Closing lines constructed between the points at the western terminus of the central Isle Dernière segment designated in 62B, *supra*, and the alternative headlands designated in 57A, *supra*, intersect islands lying to the west of the central segment shown on La. Exh. 300. (La. Exh. 300; *Louisiana Brief*, Vol. V, Part 6, Figure C-24, following p. 27.)

E. Louisiana's alternative closures at Caillou Bay (designated X, Y, and Z on sheet 2 of La. Exh. 198) all appear to meet semicircle test requirements based upon comparison of differences shown on sheet 2 of La. Exh. 198 with the additional hypothetical semicircle area generated in the calculation in 62.C, *supra*, for Line A (approx. 4,250 acres additional area).

Atchafalaya Bay

63. Atchafalaya Bay is an overlarge bay, having a mouth in excess of 24 miles. Therefore, a line 24 geographic miles in length should be drawn at the mouth of the bay in such a manner as to enclose the maximum possible water area, in accordance with Article 7(5) of the Convention. See Figure 44, *supra*.

A. The tightly clustered group of low-water ele-

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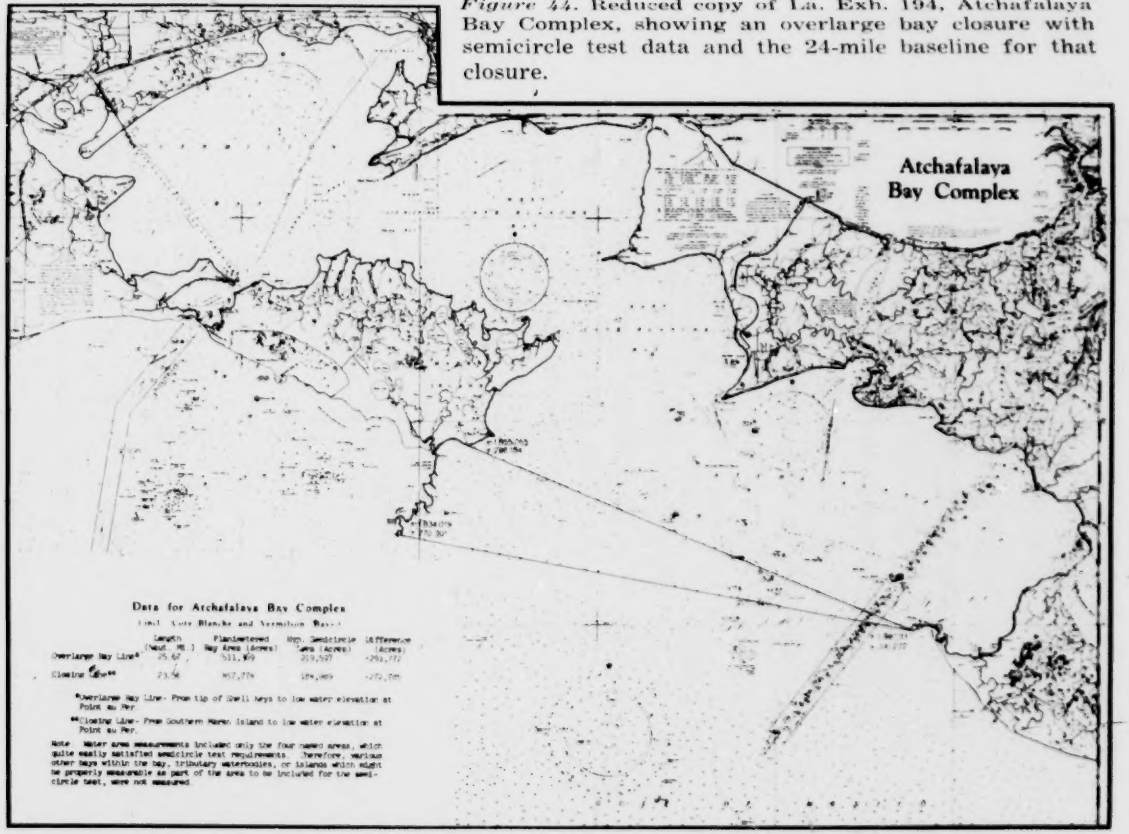
Figure 44. Reduced copy of La. Exh. 194, Atchafalaya Bay Complex, showing an overlarge bay closure with semicircle test data and the 24-mile baseline for that closure.



vations lying west of Point au Fer form a continuous reef mass which underlies Point au Fer. (Dr. Morgan, tr. 2916.)

B. Chart information controls absent clear error in the charts. Consequently, the chart practice of aggregating very closely grouped islets or low-water elevations as shown at the Point au Fer low-water feature and at Shell Keys and delimiting such aggregations as a single feature with a common low-water line is reasonable. (La. Exh. 194; U.S. Exh. 387.)

C. The tightly grouped islets comprising the Point au Fer low-water feature are larger, as a whole, than the intervening water area separating it from the mainland and, accordingly, the feature may be deemed an integral part of the mainland.

D. Facts supporting assimilation (water depths of 4 feet and distance less than 0.4 na. mi. from the mainland) compare quite favorably with those presented and accepted in the Florida Keys assimilation (Finding 55, *supra*).

E. The point lying at x = 1,987,371; y = 241,272 on the above feature constitutes an approximate eastern natural entrance point for Atchafalaya Bay. (Dr. Melamid, tr. 3301-03.)

F. The Shell Keys consisting of islands and low-water elevations lying south of Marsh Island are realistically considered as part of the mainland, and the outermost island or any of a

number of more inward island points would reasonably serve as the western natural entrance point of the bay. (U.S. Exh. 387; La. Exh. 194; Dr. Melamid, tr. 3305-06.)

G. Any lines joining the low-water elevation lying off Point au Fer with the Shell Keys reef features would meet semicircle test requirements. (Philip Whitaker, tr. 3991-93; La. Exh. 194—see Figure 44.)

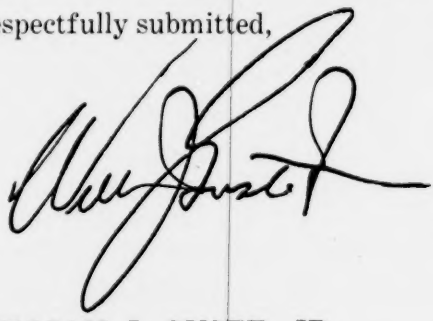
H. If the low-water elevation near Point au Fer at x = 1,987,371; y = 24,272 is realistically considered part of the mainland, a 24-mile line drawn from there at Marsh Island should be used as a baseline for projecting the 3-mile belt, except that it would not be used to contract 3-mile belts generated by islands or low-water elevations lying more seaward. See Figure 44 for location.

I. Even if the Shell Keys and the low-water elevation near Point au Fer should not realistically be treated as part of the mainland, the mainland of Point au Fer at x = 1,993,420; y = 241,930 and the mainland at Mound Point would constitute natural entrance points of an indentation which is well marked, containing landlocked waters, forming more than a mrer curvature of the coast, with a mouth in excess of 24 miles, and an area which would satisfy the semicircle test. Therefore, in any event, a closing line of 24 miles would be justi-

fied. (See La. Exh. 194, and testimony of Mr. Whitaker.)

J. If the low-water elevation near Point au Fer is not realistically considered as part of the mainland, nonetheless a 24-mile line should be drawn from the mainland on Point au Fer at x = 1,993,420; y = 241,930 to a point 24 geographic miles distant on Marsh Island seaward of South Point. Such 24-mile line should serve as a baseline for projection of the 3-mile line with the exception of more seawardly lying islands or low-water elevations having effect in projecting additional 3-mile belts.

Respectfully submitted,



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May 13, 1974

PROOF OF SERVICE

I, the undersigned, authorized to act on behalf of the State of Louisiana, certify that copies of the foregoing motion have been properly served on the 13th day of May, 1974 by mailing copies, sufficient postage prepaid, to the offices of the Attorney General and of the Solicitor General of the United States, respectively, in the Department of Justice Building, Washington, D.C.

FILE COPY

Supreme Court, U. S.
FILED
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MICHAEL RODAK, JR., CLERK

No. 9, Original

In the Supreme Court of the United States

OCTOBER TERM, 1974

UNITED STATES OF AMERICA,
Plaintiff,

v.

STATE OF LOUISIANA, ET AL.,
Defendants.

APPENDICES II AND III TO THE EXCEPTIONS OF THE STATE OF LOUISIANA TO THE REPORT OF THE SPECIAL MASTER FILED JULY 31, 1974, AND BRIEF IN SUPPORT OF EXCEPTIONS

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APPENDIX II

Part 1

Index to transcript references and to depositions in the proceeding before Walter P. Armstrong, Jr., Special Master 1

Part 2

Index to the evidence introduced by the State of Louisiana in the proceeding before Walter P. Armstrong, Jr., Special Master 7

Part 3

Index to the evidence introduced by the United States in the proceeding before Walter P. Armstrong, Jr., Special Master..159

APPENDIX III

Closing Line contentions of the State of Louisiana including point to point description 215

No. 9, Original

In the Supreme Court of the United States

OCTOBER TERM 1974

UNITED STATES OF AMERICA,
Plaintiff,

v.

STATE OF LOUISIANA, ET AL.,
Defendants.

APPENDIX II, Part 1

INDEX TO TRANSCRIPT REFERENCES AND TO DEPOSITIONS IN THE PROCEEDING BEFORE WALTER P. ARMSTRONG, JR., SPECIAL MASTER

TRANSCRIPT

INDEX OF APPEARANCE OF WITNESSES

IN NEW ORLEANS

Witness	*Volume No.*	*Pages No.*
Dr. James P. Morgan	I	34-149[1]
	II	150-283[1]
	III	287-425[1]
	IV	426-446[1]
		447-559[2]
	V	561-639[2]

[1] Direct
[2] Cross

		640-647[3]
		648-652[4]
Dr. George H. Lowery, Jr.	V	653-699[1]
	VI	701-711[1]
		712-740[2]
		740-744[3]
		744-746[4]
Mr. Allan Ensminger	VI	756-802[1]
		803-811[2]
		812-817[3]
Mr. Joseph Lawrence Billiot	VI	817-831[1]
		832-841[2]
Dr. Leo Bouchez	VII	864-078[1]
	VIII	979-995[1]
		996-1103[2]
Mr. J. Y. Christmas	VIII	1109-1122[1]
	IX	1124-1142[1]
		1143-1160[2]
Mr. John Lay	IX	1161-1210[1]
		1211-1242[2]
Mr. Richard Yancey	IX	1244-1260[1]
		1261-1263[2]
Mr. Jack Hood	IX	1269-1284[1]
Mr. Ory Poret	X	1476-1492[1]
	XI	1496-1529[1]
		1530-1571[2]
Mr. Hatley Harrison, Jr.	XI	1578-1604[1]
	XII	1611-1633[1]
		1633-1704[2]
	XIII	1707-1725[2]
Dr. Lyle S. St. Amant	XIII	1729-1742[1]
		1742-1746[2]
		1746-1747[3]

[3] Redirect
[4] Recross

Dr. John Loos	XIII	1748-1812[1]
	XIV	1816-1845[1]
		1845-1855[2]
		1855-1859[3]
Mr. Curtis L. Buttorff	XIV	1871-1950[1]
	XV	1977-2034[1]
	XVI	2060-2081[1]
		2081-2178[2]
	XVII	2185-2274[2]
		2275-2289[3]
		2289-2298[4]
Mr. Leo W. Hough	XVI	2040-2050[1]
Dr. James P. Morgan	XVIII	2325-2441[1]
	XX	2646-2770[1]
	XXI	2775-2904[1]
	XXII	2907-2960[1]
		2961-3034[2]
	XXIII	3038-3165[2]
	XXIV	3169-3209[2]
Dr. Alexander Melamid	XXIV	3217-3224[1]
		3224-3237[5]
		3237-3283[1]
	XXV	3292-3337[1]
		3337-3413[2]
Mr. Philip Larimore	XXV	3414-3420[1]
	XXVI	3424-3558[1]
	XXVII	3586-3629[1]
		3629-3694[2]
Mr. David Morgan	XXVIII	3715-3814[1]
	XIX	3833-3877[1]
		3880-3926[2]
		3929-3938[2]
Mr. Philip L. Whitaker	XXX	3945-4047[1]
		4047-4064[2]

[5] Traverse

Mr. Lindsay P. Peperone	XXX	4081-4091[1]
		4091-4094[2]
		4094-4095[3]
Mr. Francis Zimmerman	XXXI	4132-4179[1]
		4179-4183[2]
Mr. John L. Rankin	XXXI	4184-4212[1]
		4212-4217[2]

IN WASHINGTON, D.C.

Mr. Arthur I. Cooperman	XXXII	4265-4287[1]
Comm. R. Lawrence Swanson	XXXII	4287-4330[1]
		4330-4351[2]
		4351-4353[3]
Mr. Bennett G. Jones	XXXII	4353-4365[1]
	XXXIII	4413-4449[1]
		4449-4476[2]
		4476-4484[3]
Mr. Harland R. Cravat	XXXIII	4485-4521[1]
	XXXV	4556-4623[1]
		4624-4650[2]
		4650-4655[3]
		4655-4656[4]
		4657[6]
		4657[7]
Mr. Joseph K. Wilson	XXXV	4665-4676[1]
		4676-4677[2]
Dr. Charles R. Kolb	XXXV	4678-4692[1]
	XXXVI	4698-4759[1]
Dr. Roger T. Saucier	XXXVI	4759-4811[1]
		4812-4843[2]
Mr. Buford K. Meade	XXXVII	4853-4867[1]
	XXXVII	4867-4879[2]
		4879-4881[3]

[6] Further redirect
[7] Further recross

		4882-4884[4]
		4884[6]
Dr. Louis Henkin	XXXVII	4887-4927[1]
		4927-4939[2]
Mr. Donald J. Simon	XXXVII	4939-4943[1]
		4943-4947[2]
Mr. James F. Richardson	XXXVII	4947-5004[1]
	XXXVIII	5035-5037[1]
		5037-5114[2]
		5114-5121[3]
Mr. Rupert B. Southard	XXXVIII	5122-5131[1]
	XXXIX	5140-5219[1]
		5219-5251[2]
Dr. Robert D. Hodgson	XXXIX	5251-5285[1]
	XL	5300-5451[1]
	XLI	5454-5516[2]
		5516-5551[3]

IN BATON ROUGE

Mr. Philip B. Larimore	XLII	5572-5722[1]
	XLIII	5731-5824[2]
		5828-5835[2]
Mr. Curtis Buttorff	XLIII	5836-5887[1]
		5887-5908[2]
	XLIV	5918-5952[2]
Mr. David J. Morgan	XLIV	5954-6080[1]
		6081-6128[2]
	XLV	6132-6204[2]
Dr. James P. Morgan	XLV	6206-6364[1]
	XLVI	6365-6399[2]

DEPOSITIONS

Mr. James F. Richardson	La. Exh. 123
Dr. A. Joseph Wraight	La. Exh. 123
Mr. Samuel J. Nunez	La. Exh. 145, also introduced as La. Exh. 55, tab 195
Mr. Chin Dy Hoy	La. Exh. 146, also introduced as La. Exh. 55, tab 197
Mr. Abraham Schouest	La. Exh. 147, also introduced as La. Exh. 55, tab 198
Capt. Emanuel Von Lubbe	La. Exh. 148, also introduced as La. Exh. 55, tab 194
Mr. Landry Cheramie	La. Exh. 149, also introduced as La. Exh. 55, tab 196
Mr. Bennett G. Jones	U.S. Exhs. 268A and 268B
Mr. Gordon Atwater	U. S. Exh. 269
Mr. Newton Beauvais	U.S. Exh. 270
Cmdr. R. Lawrence Swanson	U.S. Exh. 417

APPENDIX II, Part 2

INDEX TO THE EVIDENCE INTRODUCED BY THE STATE OF LOUISIANA IN THE PROCEEDING BEFORE WALTER P. ARMSTRONG, JR., SPECIAL MASTER

Exhibit 1 Vita of Dr. James P. Morgan

Exhibit 2 LPI 837. Official map of Louisiana, 1969 edition showing geological areas.

Exhibit 3 LPI 1141. Charles G. Holle, *Sedimentation at the Mouth of the Mississippi River, in* PROCEEDINGS OF SECOND CONFERENCE ON COASTAL ENGINEERING, p. 111 (J. W. Johnson ed. 1951).

Exhibit 4 J. P. Morgan, *Ephemeral Estuaries of the Deltaic Environment, in* ESTUARIES, p. 115 (G. H. Lauff ed. 1967).

Exhibit 5 J. P. Morgan, "Deltas—A Résumé," *Journal of Geological Education*, Vol. XVIII, No. 3, pp. 107-117 (May, 1970).

Exhibit 6 J. P. Morgan, J. M. Coleman and S. M. Gagliano, *Mudlumps at the Mouth of South Pass, Mississippi River; Sedimentology, Paleontology, Structure, Origin and Relation to Deltaic Processes,* LOUISIANA STATE UNIVERSITY STUDIES; COASTAL STUDIES SERIES, No. 10 (1963).

Exhibit 7 J. P. Morgan, Transparencies, Vol. 1, GP-1 through GP-31, inclusive, as follows:

LIST OF OVERHEAD TRANSPARENCY ILLUSTRATIONS TO ACCOMPANY TESTIMONY OF

JAMES P. MORGAN CONCERNING GENERAL GEOLOGY, GEOLOGIC PROCESSES AND RESULTING MORPHOLOGY OF THE MISSISSIPPI RIVER DELTA.

(These transparencies were made by James P. Morgan for teaching purposes and for illustrating scientific publications. Where taken from other sources, references are given.)

Chronologic Number of Illustration	*Louisiana Preliminary Identifying Number or Citation*	*Description of Illustration*
GP-1	604	Drainage basin of the Mississippi River.
GP-2	596	Diagrammatic illustration of the longitudinal stream profile.
GP-3	1201	Geologic time scale of the Quaternary Period.
GP-4	1200	Longitudinal profile of the Mississippi River comparing present Gulf level with glacial stage Gulf level.
GP-5	591	Generalized geologic map of Louisiana in relation to glacial stage entrenched Mississippi River.
GP-6	601	Movement of stream load, suspended and bed load.
GP-7	1199	Conventional depositional sedimentary sequence in a water body.

GP-8	600	Diagrammatic illustration of a "Gilbert-type" delta. After G. K. Gilbert, "Lake Bonneville", 1890.
GP-9	598	Idealized concept of delta formation. Stages A-D.
GP-10	605	Hydrography at the mouth of an idealized distributary.
GP-11	594	Longitudinal profiles along an idealized distributary.
GP-12	595	Transverse profiles across an idealized distributary.
GP-13	599	Idealized concept of delta formation. Stages E-F.
GP-14	602	Idealized concept of delta formation. Stage G.
GP-15	597	Idealized representation of depositional environments and sediment types at a distributary mouth.
GP-16	590	Historical sequences of Mississippi Delta lobes from 4600 years (before present) to present time. Modified from Kolb and Van Lopik, 1958.
GP-17	592	Modern Mississippi River subdeltas compared with maps of 1838 and 1960.
GP-18	603	Three-dimensional illustration of the Birdfoot Delta of the Mississippi River. Modified from H. N. Fisk, 1961.

GP-19	593	Schematic diagram showing deltaic progradation in a subsiding delta.
GP-20	589	Stages in the development of interdistributary bays in an abandoned distributary system. From J. P. Morgan, 1967.
GP-21	Fig. 3 "Estuaries"	West Bay in 1816. From J. P. Morgan, 1967.
GP-22	Fig. 4 "Estuaries"	West Bay in 1922. From J. P. Morgan, 1967.
GP-23	Fig. 5 "Estuaries"	West Bay in 1958. From J. P. Morgan, 1967.
GP-24	Fig. 8 "Deltas"	Cubit's Crevasse into Bay Rondo in 1873. From J. P. Morgan, 1970.
GP-25	Fig. 8 "Deltas"	Cubit's Crevasse into Bay Rondo in 1901. From J. P. Morgan, 1970.
GP-26	Fig. 8 "Deltas"	Cubit's Crevasse into Bay Rondo in 1911. From J. P. Morgan, 1970.
GP-27	Fig. 8 "Deltas"	Cubit's Crevasse into Bay Rondo in 1925. From J. P. Morgan, 1970.
GP-28	Fig. 8 "Deltas"	Cubit's Crevasse into Bay Rondo in 1933. From J. P. Morgan, 1970.
GP-29	Fig. 8 "Deltas"	Cubit's Crevasse into Bay Rondo in 1968. From J. P. Morgan, 1970.

GP-30 Fig. 10 "Deltas" Isopach map showing sedimentary mass in Bay Rondo resulting from Cubit's Crevasse. From J. P. Morgan, 1970.

GP-31 Fig. 7 "Estuaries" Interdeltaic estuarine basin, Mississippi Delta. From J. P. Morgan, 1967.

REFERENCES TO SOURCES CITED

Fish, H. N., *Bar-finger Sands of the Mississippi Delta. in* GEOMETRY OF SANDSTONE BODIES - A SYMPOSIUM. Tulsa: Am. Assoc. Petroleum Geologists (1961), pp. 29-52.

Gilbert, G. K., Lake Bonneville: United States Geological Survey (1890), Monograph No. 1.

Kolb, C. R., and Van Lopic, J. R., *Geology of the Mississippi River Deltaic Plain, Southeastern Louisiana.* U. S. ARMY CORPS OF ENGINEERS, WATERWAYS EXPT. STA. TECH. REPT. Vicksburg (1958), pp. 3-483 and 3-484.

Morgan, J. P., *Ephemeral Estuaries of the Deltaic Environment,* in ESTUARIES, G. H. Lauff ed. : American Assoc. for Advancement of Science (1967), pp. 115-120.

Morgan, J. P., "Deltas—a Résumé," *Journal of Geological Education.* Vol. XVIII, No. 3 (May, 1970), pp. 107-117.

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Exhibit 8 U.S.C. & G.S. Chart No. 1272 - 22nd edition, December 2, 1968.

Exhibit 9 Photographs of Dr. J. P. Morgan - Volume 2, 1 through 41, inclusive, as follows:

LIST OF PHOTOGRAPHS TO ACCOMPANY TESTIMONY OF JAMES P. MORGAN CONCERNING GENERAL GEOLOGY AND MORPHOLOGY OF THE MISSISSIPPI RIVER DELTA

(All photographs taken by James P. Morgan)

Chronologic Number of Illustration	*Louisiana Preliminary Identifying Number*	*Date of Photograph*	*Description of Photograph*
1	100	6-26-69	Cubit's Crevasse opening from Mississippi River (background)
2	99	6-26-69	Cubit's Crevasse opening from Mississippi River (background) into Bay Rondo area to the east of the Mississippi Delta.
3	127	8-27-69	Cubit's Crevasse area. Mouth of Bienvenue Pass in right foreground, Mississippi Delta.
4	128	8-27-69	Mouth of Dead Woman's Pass (middle background), Cubit's Crevasse area, Mississippi Delta.
5	129	8-27-69	Mouth of Dead Woman's Pass (middle ground) Mississippi Delta.
6	102	8-27-69	Town of Venice, La. and the Jump (background) leading into West Bay. Inundation and property

			damage resulting from Hurricane Camille.
7	137	9-3-69	View northeast of mouth of Pass Du Bois, Mississippi Delta. West Bay area in background.
8	136	9-3-69	View southeast of mouth of Pass Du Bois, Mississippi Delta. Aerial view of area shown on TL-185 through 189.
9	135	9-3-69	View north at mouth of Pass Du Bois, Mississippi Delta. Ground photograph showing exhumed marsh and shell piled up by wave action resulting from Hurricane Camille.
10	131	9-3-69	Ground photo. View north at mouth of Pass Du Bois, Mississippi Delta.
11	134	9-3-69	View northwest at mouth of Pass Du Bois, Mississippi Delta. Ground photo of exhumed marsh and scattered shell resulting from Hurricane Camille.
12	132	9-3-69	View north at mouth of Pass Du Bois, Mississippi Delta. Ground photograph.
13	133	9-3-69	View northeast at mouth

			of Pass Du Bois, Mississippi Delta. Ground photograph of exhumed marsh.
14	120	8-27-69	View downstream along South Pass, Mississippi Delta. Note sedimentation in East Bay (right) through breaks in the West Bank of South Pass.
15	167	9-3-69	View of west bank, South Pass, Mississippi Delta. East Bay in foreground.
16	119	8-27-69	Sedimentation in East Bay, Mississippi Delta, through breaks in the West bank of South pass.
17	118	8-27-69	West bank of South Pass, Mississippi Delta (foreground). The Crevasse into Garden Island Bay in background.
18	117	8-27-69	West bank of South Pass, Mississippi Delta (foreground). Note lighthouse on the levee at right of photo.
19	75	6-26-69	Sediment-laden water flowing across Southwest Pass levees into West Bay, Mississippi Delta.
20	160	9-3-69	West bank of South Pass, Mississippi Delta. East Bay to right.

21	158	9-3-69	Crevasse opening into East Bay from South Pass, Mississippi Delta. Midway between Upper Cave Light and Old Grand Bayou Light.
22	163	9-3-69	Mud flats and marsh extending into East Bay from west bank of South pass, Mississippi Delta.
23	170	9-3-69	View looking east-northeast across shoal in East Bay, Mississippi Delta. South Pass and fresh water reservoir in distance.
24	105	8-27-69	Mouth of Southwest Pass (right background) and sand spit extending into East Bay, Mississippi Delta.
25	145	9-3-69	East Bay sand spit. Southwest Pass and levees in background.
26	144	9-3-69	East Bay sand pit. Southwest Pass and levees in background.
27	143	9-3-69	East Bay sand spit. Southwest Pass and levees in background.
28	104	8-27-69	View south along sand spit in East Bay. South-

			west Pass, Mississippi River in right of photo.
29	76	6-26-69	View West toward Mouth of Southwest Pass showing sand spit extending northward into East Bay, Mississippi Delta.
30	140	9-3-69	East bank of Southwest Pass, Mississippi Delta in foreground. Note sand spit extending into East Bay (middle ground).
31	146	9-3-69	North end of sand spit in East Bay. Southwest Pass in background. Double Bayou in distance.
32	112	8-27-69	View northwest across Joseph Bayou area. Southwest Pass in background, Mississippi Delta.
33	150	9-3-69	Joseph Bayou area. Upper end of East Bay, Mississippi Delta. Head of Passes in background, Joseph Bayou in foreground.
34	152	9-3-69	View south down Joseph Bayou into East Bay, Mississippi Delta.
35	149	9-3-69	View east across mouth of Joseph Bayou, Mississippi Delta. South Pass in background.

36	151	9-3-69	Joseph Bayou area. Upper end of East Bay, Mississippi Delta. Head of Passes in background, Joseph Bayou in foreground.
37	154	9-3-69	Upper (northern) end of East Bay, Mississippi Delta. Head of Passes in background.
38	116	8-27-69	View northwest across Joseph Bayou area, Mississippi Delta.
39	113	8-27-69	View west across south end of Joseph Bayou area, Mississippi Delta.
40	147	9-3-69	View southeast across East Bay. Mouth of Joseph Bayou in center of photograph. South Pass in distance.
41	148	9-3-69	View southeast across East Bay. Mouth of Joseph Bayou in left middle ground. South Pass in distance.

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Exhibit 10 J. P. Morgan, *Genesis and Paleontology of the Mississippi River Mudlumps*, Louisiana Geological Survey, Bulletin No. 35 (1961).

Exhibit 10-A Exhibits to James P. Morgan, *Gene-*

sis and Paleontology of the Mississippi River Mudlumps, Louisiana Geological Survey, Bulletin No. 35 (1961).

Exhibit 11 J. P. Morgan, J. R. Coleman and S. M. Gagliano, *Mudlumps: Diapiric Structures in Mississippi Delta Sediments, in* DIAPIRISM AND DIAPIRS, Am. Assoc. Petroleum Geologists, Memoir No. 8, pp. 145-161 (1968).

Exhibit 12 Photographs by Dr. J. P. Morgan of Mudlumps, Vol. 3, 1 through 52, inclusive, as follows:

LIST OF PHOTOGRAPHS AND ILLUSTRATIONS TO ACCOMPANY TESTIMONY OF JAMES P. MORGAN CONCERNING MUDLUMPS AT THE MOUTHS OF THE MISSISSIPPI RIVER

(all illustrations or photographs by James P. Morgan unless otherwise annotated)

Chronologic Number of Illustration	*Louisiana Preliminary Identifying Number or Citation*	*Date of Photograph or Publication*	*Description of Photograph or Illustration*
1	Fig. 1, Mem. 8	1968	Areas of mudlump development at major distributary mouths, Mississippi River Delta.
2	98	6-26-69	Mudlump islands seaward from Pass A Loutre-North Pass, Mississippi Delta (background).

3	97	6-26-69	Mudlump island seaward from mouth of Pass A Loutre, Mississippi Delta.
4	95	6-26-69	Mudlump islands seaward from mouth of Pass A Loutre, Mississippi Delta.
5	96	6-26-69	Detail of largest mudlump island off mouth of Pass A Loutre, Mississippi Delta. Island is also shown on photos TL-54 and TL-56.
6	Fig. 6, Bull. 35	Sept. 61	Schematic cross section of typical mudlump, indicating stratigraphic and structural characteristics.
7	Fig. 4, Bull. 35	Sept. 61	Furrowed surface appearance of mudlump island. Aerial photograph of NP-3 taken April 1948 (H. N. Fisk) [1].
8	93	6-26-69	Mudlump seaward from mouth of Northeast Pass, Mississippi Delta. See photo TL-51 for relationship to land.
9	92	6-26-69	Ground photograph showing details of mudlump island at mouth of Northeast Pass, Mississippi Delta. See photo TL-51 for relationship to land.
10	125	8-27-69	Southeast Pass mudlump

[1] Photograph taken April 1948 by H. N. Fisk.

			islands with the mouth of the pass in background. See TL-132.
11	87	6-26-69	Mouth of Southeast Pass, Mississippi Delta (background) and some of the mudlump islands.
12	124	8-27-69	Southeast Pass mudlump islands. View taken looking seaward. See TL-134.
13	85	6-26-69	Mudlump seaward from the mouth of Southeast Pass, Mississippi Delta. Old Balize Bayou in left background.
14	89	6-26-69	Detail of mudlump island nearest mouth of Southeast Pass, Mississippi Delta. (See photo TL-40, TL-45 and TL-46 also of same island.)
15	91	6-26-69	Same as TL-43. Detail of mudlump island nearest mouth of Southeast Pass, Mississippi Delta (See photo TL-40).
16	90	6-26-69	Same as TL-43. Detail of mudlump island nearest mouth of Southeast Pass, Mississippi Delta (See photo TL-40).
17	88	6-26-69	Group of three mudlump

			islands seaward from the mouth of Old Balize Bayou, Mississippi Delta.
18	84	6-26-69	South Pass jetties, sand spit and mudlumps. Fresh water-marine water boundary in left foreground.
19	81	6-26-69	Detail of central mudlump shown on photo TL-37. Mudlumps No. 89-90 and South Pass sand spit and jetties in distance.
20	121	8-27-69	East Jetty South Pass, Mississippi Delta (foreground). Coast Guard Station and Bar Pilot Station on west bank. Mudlump islands in background.
21	122	8-27-69	Shoal area waves over South Pass sand spit which was breached by Hurricane Camille. South Pass mudlump islands in left middle ground.
22	123	8-27-69	South Pass mudlump islands. Waves breaking (left middle ground) show position of sand spit which was breached by Hurricane Camille.
23	Fig. 44, Bull. 35	Sept. 61	Aerial photograph of South Pass mudlumps.

			Left to right, Sp-4, Sp-1, Sp-2 and Sp-3.
24	82	6-26-69	Spit composed of organic matter (coffee grounds) extending westward from mudlumps 89-90 at mouth of South Pass into East Bay, Mississippi Delta.
25	77	6-26-69	Ground photo showing spit comprised of organic material (coffee grounds) extending East Bay from Mudlump 89-90 at mouth of South Pass, Mississippi Delta.
26	168	9-3-69	Ground photograph looking south of South Pass mudlump 89-90. Note wave cut bench and "ramassis" (plant debris) from Hurricane Camille.
27	Fig. 16, Bull. 35	Sept. 61	Raised terrace, left foreground, has resulted from secondary uplift of island SP-1. Tilting has caused the cliff to increase from 2 feet (foreground to about 5 feet (background). Two earlier terraces are shown at left.
28	Fig. 7, Mem. 8	1968	Coring operations on mudlump 89-90, South Pass.
29	977	8-63	View looking south of

			borehole casing in mudlump SP 89-90. Small mudlump island in background is mudlump 92, "the castle."
30	989	6-63	View looking south at mudlump 92, "the castle."
31	1006	1-69	View looking northeast of South Pass sand spit with mudlump No. 92 in foreground.
32	79	6-26-69	Detail of central mudlump shown on photo TL-27, mouth of South Pass, Mississippi Delta.
33	78	6-26-69	Three mudlumps breaking the water surface at mouth of South Pass, Mississippi Delta. Note: Mudlumps are shown on the seaward (right margin) side of photo TL-37.
34	80	6-26-69	Detail of rear (easternmost) mudlump shown on photo TL-27, South Pass, Mississippi Delta.
35	979	11-64	Ground view on south side of mudlump 94, South Pass.
36	981	11-64	Ground view of mudlump 94 with geologists collecting fossils.

37	967	11-64	Ground photograph looking toward the northwest of the west side of mudlump 93 at South Pass. Photograph taken at low tide.
38	Fig. 4, Mem. 8	1968	South Pass mudlump islands mapped during period from 1876 to 1961.
39	Fig. 5, Mem. 8	1968	Island and submarine mudlump distribution at South Pass. Data from 123 maps dated between 1876 and 1961.
40	Fig. 42, Bull. 35	Sept. 61	Advance of the bar at South Pass, 1920 to 1950.
41	Fig. 43, Bull. 35	Sept. 61	Map of the bar at South Pass. Submarine mudlumps indicated.
42	Fig. 10, Mem. 8	1968	Sites of appearance of initial mudlumps and their progression, determined from maps dated between 1867 and 1961.
43	Fig. 40, Bull. 35	Sept. 61	Advance of the bar at Southwest Pass, 1920 to 1950.
44	Fig. 41, Bull. 35	Sept. 61	Map of the bar at Southwest Pass. Submarine mudlumps indicated.
45	Fig. 36, Bull. 35	Sept. 61	Schematic diagram showing relationship between

		bar growth and mudlump development.
46	Fig. 6, 1968 Mem. 8	Bore-hole locations and profile line along South Pass sand spit.
47A	Fig. 22, 1968 Mem. 8	Diagrammatic representation of South Pass mudlump origin and development, Stage A.
47B	Fig. 22, 1968 Mem. 8	Diagrammatic representation of South Pass mudlump origin and development, Stage B.
47C	Fig. 22, 1968 Mem. 8	Diagrammatic representation of South Pass mudlump origin and development, Stage C.
47D	Fig. 22, 1968 Mem. 8	Diagrammatic representation of South Pass mudlump origin and development, Stage D.
47E	Fig. 23, 1968 Mem. 8	Diagrammatic representation of South Pass mudlump origin and development, Stage E.
47F	Fig. 23, 1968 Mem. 8	Diagrammatic representation of South Pass mudlump origin and development, Stage F.
47G	Fig. 23, 1968 Mem. 8	Diagrammatic representation of South Pass mudlump origin and development, Stage G.

47H	Fig. 23, Mem. 8	1968	Diagrammatic representation of South Pass mudlump origin and development, Stage H.
48	Fig. 9, Mem. 8	1968	Shallow subsurface stratigraphy and structure of South Pass. Line of section is shown in Fig. 6.
49	Fig. 18, Mem. 8	1968	Multiple reverse faulting found on wave-planed surface of South Pass mudlump 94.
50	Fig. 5, C.S.I No. 10	1963	Comparison maps showing South Pass sand spit development and its relationship to mudlump islands.
51	LPI No. 968	Dec. 1969	View looking southwest of steamship aground in East Bay. Mudlump 89-90 in foreground and mudlump 93 in left rear of photograph.
52	LPI No. 965	Dec. 1969	Steamship aground in East Bay to the west of mudlump 93.

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PUBLICATIONS CITED

Morgan, James P., "Mudlumps at the Mouths of the Mississippi River," *in Genesis and Paleontology of the Mississippi River Mudlumps.* Louisiana Geological Survey, Bulletin No. 35 (1961), pp. 1-116.

Morgan, James P., Coleman, James M., and Gagliano, Sherwood M., *Mudlumps: Diapiric Structures in Mississippi Delta Sediments, in* DIAPIRISM AND DIAPIRS. American Association of Petroleum Geologists, Memoir No. 8 (1968), pp. 145-161.

Morgan, James P., Coleman, James M., and Gagliano, Sherwood M., *Mudlumps at the Mouth of South Pass, Mississippi River; Sedimentology, Paleontology, Structure, Origin, and Relation to Deltaic Processes.* LOUISIANA STATE UNIVERSITY STUDIES; COASTAL STUDIES SERIES, No. 10 (1963).

Exhibit 13	LPI 1224)
Exhibit 14	LPI 1228)
Exhibit 15	LPI 1227) Photos of birds and peli-
Exhibit 16	LPI 1226) cans by Dr. Morgan
Exhibit 17	LPI 1225)
Exhibit 18	LPI 1060, "Areas in Dispute in Louisiana Closing Line Contentions."
Exhibit 19	LPI 618, Mudlumps photo, M-101-6 dated June 26, 1969, Mouth of Southeast Pass, Mississippi Delta, with mudlump islands in foreground, view toward the northwest.
Exhibit 20	LPI 617, Photograph by Dr. James

	P. Morgan concerning distribution of mudlumps at South Pass, M-101-5 dated June 26, 1969, South Pass mudlumps and sand spit, Mississippi Delta. Mudlump 93 on left of photo. Mudlump 89-90 in the central part of photo and new mudlumps offshore in right central part of photo.
Exhibit 21	LPI 362 through 430—Louisiana Original Brief Exhibit No. 21, 1 through 69 (includes Talcott's 1839 map).
Exhibit 22	LPI 1202—copy of notes by Dr. James P. Morgan and Mr. David Morgan which reflect the published nautical charts of the period of 1873 through 1969 for the Mississippi Delta Region and East Bay changes reflected thereby.
Exhibit 23	LPI 1054. Set of display materials pertaining to historic changes and semicircle data in East Bay. (1839-1956)
Exhibit 23-A	LPI 1054 (same as above with the overlays)
Exhibit 24	A list of scientific publications by Dr. James P. Morgan.
Exhibit 25	Case of *The Anna*, 5 C. Rob. 373.
Exhibit 26	LPI 647—Bucket Bend Bay Exhibit.
Exhibit 26-A	Corrected sheet to Ex. 26.
Exhibit 27	LPI 1053—Opinion of the Solicitor

Cox, dated December 20, 1963, approved by the then Attorney General, Robert Kennedy, addressed to the General, the Honorable Archibald Secretary of the Interior, at the request of the President concerning lands originally formed as islands in the marginal seas. Attached to the opinion is a letter dated December 20, 1963, by the Attorney General to the Secretary of the Interior expressing his accord.

Exhibit 28 Matters relating to Tern Islands and other Bird Reservations as follows:

Description	*Louisiana Preliminary Identifying Number*
1. Executive Order of August 8, 1907	199 & 217
2. "Bird Lore for 1907," pp. 229 *et seq.*	203
3. Map of the State of Louisiana compiled from the official records of the General Land Office dated 1916 (See Exh. 258)	66
4. Map of the State of Louisiana compiled from the official records of the General Land Office dated 1930	215
5. Map of Plaquemines Parish (South Section), Louisiana, dated 1958	216
6. Quadrangle Map of East Delta, Louisiana, 1959 edition	204
7. 31 F.R. 16024 dated December 15, 1966	

31 F.R. 7686 dated May 24, 1968 205

8. 31 F.R. 16027 dated December 15, 1966 206

9. 31 F.R. 16027 dated December 15, 1966 207

10. *Alaska Pacific Fisheries v. United States*, 39 S.C. 40, 248 U.S. 78 (1918)

11. *United States of America v. State of Alaska, et al.* 423 F. 2d 764 (1970)

12. General correspondence regarding Tern Islands Reservation 211 & 218

13. Bureau of Land Management Miscellaneous File No. 1883786 220

14. Fish and Wildlife Service Files LAEO—Louisiana, Tern Islands and Gas and Oil LA—Louisiana, Tern Islands 219

15. First Formal Request for Admissions by State of Louisiana dated April 29, 1970, and Response to Louisiana's First Formal Request for Admissions by United States

16. State of Louisiana's Interrogatories dated February 3, 1970, and Response of United States thereto dated March 4, 1970

17. State of Louisiana's Interrogatories dated October 23, 1969, and Answers of United States with attach-

ments thereto dated December 23, 1969

18. State of Louisiana's Request to the Bureau of Sports Fishery dated December 8, 1969, and Response of United States thereto dated January 20, 1970

19. Directory of National Wildlife Refuges 209

20. Wildlife Sanctuaries in Louisiana from First Biennial Report of the Department of Wild Life and Fisheries Commission, 1944 and 1945 210

21. Memorandum dated September 25, 1952, addressed to the Bureau of Land Management suggesting revocation of Tern Islands Reservation 201

22. Public Land Order No. 892 of April 15, 1953, 18 Federal Register 2342, dated April 22, 1953, which revoked Tern Islands Reservation 202

23. Birds of Sabine National Wildlife Refuge 819

24. Birds of Lacassine National Wildlife Refuge 820

25. Lacassine National Wildlife Refuge 821

26. Executive Order of August 17, 1907, creating Shell Keys Reservation 822

27. General correspondence regarding Shell Keys Reservation 824

28. Birds of the Delta National Wildlife Refuge 212

29. National Wildlife Refuges in Southeast Region 4 213

30. General correspondence regarding East Timbalier Island 823

31. Gulf Island National Wildlife Refuges (Breton) 825

32. General correspondence regarding Breton National Wildlife Refuge 826

33. Inspection Report of East Timbalier Bird Reservation dated April 7, 1947, by John Lynch, Biologist 1162

34. Refer the Court to 18 U.S.C. 41

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Exhibit 29 LPI 215 - Map of the State of Louisiana compiled from the Official Records of General Land Office - 1930

Exhibit 30 LPI 1007 - Picture of bird display at Louisiana State University Museum

Exhibit 31 LPI 775)

Exhibit 32 LPI 776)

Exhibit 33 LPI 807)

Exhibit 34 LPI 812)

Exhibit 35 LPI 814) Photographs taken by Allan

Exhibit 36 LPI 816) Ensminger on flight over

Exhibit 37	LPI 800) Mississippi Delta area in January, 1970
Exhibit 38	LPI 805)
Exhibit 39	LPI 815)
Exhibit 40	LPI 798)
Exhibit 41	LPI 1192 - View of fresh dredge spoil jetties (Photograph by Mr. Allan Ensminger)
Exhibit 42	LPI 787 - Photograph taken by Mr. Allan Ensminger on flight over Mississippi Delta area January, 1970
Exhibit 43	LPI 783 - Photograph taken by Mr. Allan Ensminger on flight over Mississippi Delta area, January, 1970
Exhibit 44	LPI 1191 - View of portion of spit above water at mouth of Pass Tante Phine (Photograph by Mr. Allan Ensminger)
Exhibit 45	LPI 1187 - View of portion of spit at Pass Tante Phine above water (Photograph by Mr. Allan Ensminger)
Exhibit 46	LPI 1188 - View of islands breaking up north of West Bay (Photograph by Mr. Allan Ensminger)
Exhibit 47	LPI 1189 - View of island headland at north side of West Bay (Photograph by Mr. Allan Ensminger)
Exhibit 48	LPI 780 - Photograph taken by Mr. Allan Ensminger on flight over Mississippi Delta area in January, 1970

Exhibit 49 Index to Mr. Allan Ensminger's photographs

Exhibit 50 U. S. C. & G. S. Chart No. 1275, Edition 10, June 27, 1970

Exhibit 51 A History of the Inland Water Line, as follows:

A HISTORY OF THE INLAND WATER LINE

CONTENTS

Description	*Louisiana Preliminary Identifying Number*
1. Refer the Court to the Act of August 19, 1890 (Rules for the prevention of collisions on the high seas)	
2. Refer the Court to United States Revised Statute 4233, Act of April 29, 1864, c. 69, 13 Stat. 58	
3. Refer the Court to Act of February 19, 1895, and amendments (28 Stat 672 32 Stat 829 37 Stat 736 60 Stat 1097 33 USC 151)	
4. Refer the Court to Act of June 7, 1897 (30 Stat 96)	
5. Department of Treasury Circular No. 127 issued June 13, 1895	188
6. Treasury Department Circular No. 88 of 1897	1161

7. Refer the Court to 1895 Edition of United States Coast & Geodetic Survey Coast Chart No. 194 (Exhibit 6 to Louisiana Brief of October, 1968) 367

8. Treasury Department Circular No. 107 of 1900 189

9. Department of Commerce and Labor Circular No. 61 of March 9, 1905 190

10. Department of Commerce and Labor Circular No. 88 of 1905 191

11. Department of Commerce and Labor Circular No. 158 of November 21, 1907 192

12. Refer the Court to 1907 Edition of United States Coast & Geodetic Survey Coast Chart No. 194 (Exhibit 8 to Louisiana Brief of October, 1968) 369

13. Department of Commerce Circular No. 230 of 1911 193

14. Refer the Court to Exhibit 10 to Louisiana Brief

15. Department of Commerce Circular No. 230 of June 8, 1917 194

16. Department of Commerce Circular No. 230 of October 10, 1927 195

17. Department of Commerce Circular No. 230 of December 26, 1928 196

18. Department of Commerce Circular No. 230 of December 8, 1932 — 197

19. Refer the Court to Federal regulation of December, 1953

20. Refer the Court to Exhibits 12, 14, 16 and 18 of Louisiana Brief of October, 1968 (prior editions of United States Coast & Geodetic Survey Charts No. 194 and superceding Chart No. 1272) — 373, 375, 377, 379

21. Refer the Court to Exhibit 20 of Louisiana Brief — 381

22. Refer the Court to Maps and other materials showing location of Inland Water Lines designated and defined under the Act of February 19, 1895 — 1027

23. Copy of transcript of hearing on the proposed change of the line of Demarcation held at New Orleans, Louisiana, August 7, 1967 — 49

24. Copy of transcript of public hearing concerning the lines of demarcation between Inland and International Rules of the Road, conducted at Morgan City, Louisiana, on August 3, 1967 — 50

Exhibit 52 Census of the United States, as follows:

LOUISIANA EXHIBIT No. 52
CENSUS OF THE U. S.

CONTENTS

Description	*Louisiana Preliminary Identifying Number*
1. A published book entitled, *Measurement of Geographic Area by Malcolm J. Proudfoot*, published by the Bureau of the Census of the United States Department of Commerce in connection with the 1940 16th census of the United States	72
2. Area Measurement reports published by the Bureau of the Census of the United States Department of Commerce showing areas of Louisiana: 1960, July, 1967, G. E. - 20, No. 20	1129

Exhibit 53 The Captain of the Port of New Orleans, as follows:

THE CAPTAIN OF THE PORT OF NEW ORLEANS

CONTENTS

Description	*Louisiana Preliminary Identifying Number*
1. Refer the Court of CFR Subpart 67.50	
2. Refer the Court to 33 CFR Part 6, Parts 121, 122 and 124, 125, 126	

3. Refer the Court to 46 CFR Parts 146, 147

4. Refer the Court to 33 CFR subpart 3.40-75

5. Coast Guard seizure of Przemyal dated October 29, 1927 221

6. Coast Guard seizure of "Emilia G" dated September 24, 1925 222

7. Coast Guard seizure No. 874 of Fleur de Lis 223

8. Coast Guard seizure of Memthis dated April 22, 1930 224

9. Coast Guard seizure of St. Francisco 225

10. United States Coast Guard Law Enforcement at Sea Relative to Smuggling 226

11. Refer the Court to the prohibition case of *Ford, et al. v. United States*, 47 S.Ct. 531

12. Refer the Court to the prohibition case of *Cunard S. S. Co. v. Mellon*, 43 S. Ct. 504

13. Refer the Court to the prohibition case of *Cook v. United States*, 53 S.Ct. 305

14. State of Louisiana's Second Formal Requests for Admissions (with attachments) and Response of United States

15. State of Louisiana's Interrogatories

of October 23, 1969, and Response of United States

16. United States' Interrogatories of January 20, 1970, and Response of State of Louisiana

17. Refer the Court to 33 CFR Subpart 37.50 and 33 CFR subpart 3.40 - 10 regarding New Orleans Marine Inspection Zone

****

Exhibit 54 Permits Issued by United States Army Corps of Engineers for Dredging Canals and Other Operations in East Bay, as follows:

PERMITS ISSUED BY UNITED STATES ARMY CORPS OF ENGINEERS FOR DREDGING CANALS AND OTHER OPERATIONS IN EAST BAY

CONTENTS

Description	*Louisiana Preliminary Identifying Number*
1. Permit file from records of New Orleans District Corps of Engineers, granting permit to Shell Oil Company to dredge in East Bay area with identifying cover sheet marked GM 276	1152
2. A Department of the Army permit from New Orleans District Office of the Corps of Engineers to the California Company, dated September 28, 1953, to dredge in tribu-	

taries of East Bay area with related files from New Orleans District Corps of Engineers 1153

3. Permit from New Orleans District of the Corps of Engineers, dated 11 December 1950, with related correspondence including request, dated 22 September 1950, from Shell Oil Company the permittee, with cover title sheet marked GM 192 from records of New Orleans District, U. S. Corps of Engineers 1154

4. Request from Shell Oil Company to Corps of Engineers, New Orleans District, dated April 21, 1949, and permit dated May 12, 1949, to Shell Oil Company for dredging from records of New Orleans District Corps of Engineers 1155

****

Exhibit 55 Fishing Regulations in Five Volumes as follows:

VOLUME I

FISHING REGULATIONS

CONTENTS

Description	*Louisiana Preliminary Identifying Number*
1. Act 18 of 1870	29
2. Act 106 of 1886	28
3. Act 110 of 1892	27

4.	Act 121 of 1896	26
5.	Act 153 of 1902	25
6.	Act 52 of 1904	24
7.	Act 144 of 1908	23
8.	Act 189 of 1910	22
9.	Act 127 of 1912	21
10.	Act 6 of 1917	20
11.	Act 139 of 1924	19
12.	Act 258 of 1926	18
13.	Act 67 of 1932	17
14.	Act 227 of 1944	263 & 16
15.	R.S. 56:421 through 460	
16.	*Louisiana Land & Fish Co. v. Gasquet*, 45 La. Ann. 759	
17.	*Doucet v. Texas Co.*, 17 So. 2d 340, 205 La. 312	
18.	Opinion of Attorney General's Office dated December 8, 1937	228

VOLUME 2

19.	Oyster Lease No. 3405 dated November 17, 1914, to United Fish & Oyster Co.	722
20	Oyster Lease No. 356 dated July 20, 1904, to Miss Henrietta McLaughlin	747
21.	Oyster Lease No. 355 dated July 20, 1904, to Mrs. F. McLaughlin	732

22. Oyster Lease No. 357 dated July 20, 1904, to Miss M. McLaughlin 727

23. Oyster Lease No. 299 dated May 18, 1904, to Mrs. F. J. Lobrano 740

24. Oyster Lease No. 642 dated December 21, 1904, to Julien Cadro 749

25. Oyster Lease No. 3402 dated November 17, 1914, to United Fish & Oyster Co. 754

26. Oyster Lease No. 57 dated June 17, 1903, to Louis Diemell 717

27. Oyster Lease No. 300 dated May 18, 1904, to Miss Bertha Diemel 693

28. Oyster Lease No. 47 dated May 20, 1903, to Peter Spongia 738

29. Oyster Lease No. 46 dated May 20, 1903, to Louis Spongia 723

30. Oyster Lease No. 45 dated May 20, 1903, to Peter Spongia 716

31. Oyster Lease No. 59 dated June 17, 1903, to John McLaughlin 715

32. Oyster Lease No. 40 dated May 20, 1903, to John Conaway 720

33. Oyster Lease No. 643 dated December 21, 1904, to Frank Morgan 750

34. Oyster Lease No. 644 dated December 21, 1904, to Capt. Erick Anderson 733

35. Oyster Lease No. 636 dated De-

cember 21, 1904, to Thomas Jackson 748

36. Oyster Lease No. 308 dated July 20, 1904, to Edward W. Fitzgerald 651

37. Oyster Lease No. 307 dated July 20, 1904, to John W. Jackson 648

38. Oyster Lease No. 319 dated July 20, 1904, to Thomas Jackson 655

39. Oyster Lease No. 44 dated May 20, 1903, to Frank Miller 718

40. Oyster Lease No. 294 dated May 18, 1904, to Frank Richmond 694

41. Oyster Lease No. 297 dated May 18, 1904, to Hope Lamb & John Thomas Burns 674

42. Oyster Lease No. 295 dated May 18, 1904, to Warrick Brown 675

43. Oyster Lease No. 292 dated May 18, 1904, to Steven F. Purgley 673

44. Oyster Lease No. 291 dated May 18, 1904, to Gilmore & Jackson 714

45. Oyster Lease No. 774 dated February 15, 1905, to Joseph Cadro 731

46. Oyster Lease No. 775 dated February 15, 1905, to Messrs. O'Brien & Connaway 730

47. Oyster Lease No. 48 dated May 20, 1903, to Walter Miller 695

48. Oyster Lease No. 4168 dated November 22, 1918, to Erick Anderson 662

49. Oyster Lease No. 3400 dated November 17, 1914, to United Fish & Oyster Co. 653

50. Oyster Lease No. 3401 dated November 17, 1914, to United Fish & Oyster Co. 686

51. Oyster Lease No. 315 dated July 20, 1904, to A. E. Washburn 689

52. Oyster Lease No. 313 dated July 20, 1904, to Morgan Loar & Co. 652

53. Oyster Lease No. 317 dated July 20, 1904, to John Conaway 741

54. Oyster Lease No. 3420 dated December 5, 1914, to Mrs. Frank McLaughlin 682

55. Oyster Lease No. 303 dated May 18, 1904, to William A. Loar 692

56. Oyster Lease No. 335 dated July 20, 1904, to Andrew Spongin 688

57. Oyster Lease No. 640 dated December 21, 1904, to John Repath & Co. 687

58. Oyster Lease No. 3403 dated November 17, 1914, to United Fish & Oyster Co. 685

59. Oyster Lease No. 3408 dated November 17, 1914, to United Fish & Oyster Co. 683

60. Oyster Lease No. 3406 dated November 17, 1914, to United Fish & Oyster Co. 684

61. Oyster Lease No. 3422 dated December 5, 1914, to Mrs. Frank McLaughlin 680

62. Oyster Lease No. 3398 dated November 17, 1914, to United Fish & Oyster Co. 681

63. Oyster Lease No. 3416 dated December 5, 1914, to Mrs. Frank McLaughlin 725

64. Oyster Lease No. 3404 dated November 17, 1914, to United Fish & Oyster Co. 734

65. Oyster Lease No. 3275 dated September 11, 1914, to Zanenovich & Spongia 753

66. Oyster Lease No. 4165 dated November 22, 1918, to Brick Anderson 755

67. Oyster Lease No. 4176 dated November 27, 1918, to Leonard F. Edgecombe 756

68. Oyster Lease No. 3770 dated September 10, 1910, to Frank J. Lobrano 757

69. Oyster Lease No. 3407 dated November 17, 1914, to United Fish & Oyster Co. 758

70. Oyster Lease No. 337 dated July 20, 1904, to John Spongia 760

71. Oyster Lease No. 293 dated May 18, 1904, to E. D. Jones 765

72. Oyster Lease dated March 25, 1903, to Whale Bay Oyster Co. 774

73. Oyster Lease No. 3399 dated November 17, 1914, to United Fish & Oyster Co. 742

74. Oyster Lease No. 1005 dated August 16, 1905, to Lobrano & McLaughlin 751

75. Oyster Lease No. 2842 dated July 15, 1912, to United Fish & Oyster Co. 752

76. Oyster Lease No. 298 dated May 18, 1904, to S. B. George & T. Kelly 772

77. Oyster Lease No. 349 dated November 18, 1908, to Nebert Burns 712

78. Oyster Lease No. 353 dated November 18, 1908, to Octave Barrios 708

79. Oyster Lease No. 386 dated July 20, 1904, to Red Fish Bay Oyster Co. 700

80. Oyster Lease No. 342 dated November 18, 1908, to Thomasin Burrois 690

81. Oyster Lease No. 351 dated June 15, 1905, to Ambroise Ansardi 710

82. Oyster Lease No. 348 dated November 18, 1908, to Augustin Burrois 713

83. Oyster Lease No. 350 dated November 18, 1908, to Lucies Buras 711

84. Oyster Lease No. 346 dated June 15, 1905, to P. V. Lacoste 696

85. Oyster Lease No. 383 dated July 20, 1904, to James Kiger 706

86. Oyster Lease No. 384 dated July 20, 1904, to Luke Johnson 701

87. Oyster Lease No. 387 dated July 20, 1904, to Delesdernier & Kiger 69?

88. Oyster Lease No. 382 dated July 20, 1904, to Joseph P. Logn 707

89. Oyster Lease No. 385 dated July 20, 1904, to George W. Delesdernier 697

90. Oyster Lease No. 388 dated July 20, 1904, to J. T. Delesdernier 698

91. Oyster Lease No. 352 dated July 20, 1904, to John Ansel, Jr. 709

92. Oyster Lease No. 341 dated June 15, 1905, to E. J. Rodricquez 702

93. Oyster Lease No. 343 dated June 1, 1931, to Frank Musemeche 704

94. Oyster Lease No. 347 dated November 18, 1908, to Jeff C. Wenck 691

95. Oyster Lease No. 311 dated July 20, 1904, to Thomas Bulot & Louis Baril 668

96. Oyster Lease No. 314 dated July 20, 1904, to M. Baril 661

97. Oyster Lease No. 320 dated July 20, 1904, to John Ricovard 664

98. Oyster Lease No. 321 dated July 20, 1904, to J. G. Davis 656

99. Oyster Lease No. 56 dated May 20, 1903, to W. P. Hingle 663

100. Oyster Lease No. 302 dated May 18, 1904, to Mrs. Alexander Conway 658

101. Oyster Lease No. 296 dated May 18, 1904, to Mrs. Charles Post 659

102. Oyster Lease No. 310 dated July 20, 1904, to Alexander Conway 660

103. Oyster Lease No. 42 dated May 20, 1903, to Gustave Gusdrof 650

104. Oyster Lease No. 49 dated May 20, 1903, to August Johnson 649

105. Oyster Lease No. 43 dated May 20, 1903, to J. J. Williams 657

106. Oyster Lease No. 50 dated May 20, 1903, to Erick Anderson 676

VOLUME 3

107. Oyster Lease No. 2737 dated December 1, 1911, to W. J. Armstrong 677

108. Oyster Lease No. 318 dated July 20, 1904, to Charles Post 654

109. Oyster Lease No. 344 dated November 18, 1908, to George Burrois 705

110. Oyster Lease No. 309 dated July 20, 1904, to John Dugas 721

111. Oyster Lease No. 4194 dated December 12, 1918, to W. J. Armstrong 724

112. Oyster Lease No. 3636 dated October 18, 1915, to Nick Popich 726

113. Oyster Lease No. 1503 dated June 19, 1907, to W. J. Armstrong 729

114. Oyster Lease No. 340 dated July 20, 1904, to Chris Ansel 746

115. Oyster Lease No. 345 dated June 15, 1905, to Erick Anderson 759

116. Oyster Lease No. 336 dated July 20, 1904, to S. B. George & T. Kelly 768

117. Oyster Lease No. 3788 dated September 19, 1917, to Gulf Packing Co. 771

118. Oyster Lease No. 41 dated May 20, 1900, to Anton Duhon 773

119. Oyster Lease No. 11639 dated July 20, 1948, to Golden Meadows Fisheries Co. 764

120. Oyster Lease No. 11638 dated July 20, 1948, to Golden Meadows Fisheries Co. 767

121. Oyster Lease No. 11640 dated July 20, 1949, to Golden Meadows Fisheries 728

122. Oyster Lease No. 11641 dated July 20, 1948, to Golden Meadows Fisheries Co. 761

123. Oyster Lease No. 11637 dated July 20, 1948, to Golden Meadows Fisheries Co. 766

124. Oyster Lease No. 11642 dated July 20, 1948, to Golden Meadows Fisheries Co. 762

125. Oyster Lease No. 7061 dated July 15, 1929, to Constant Callahan 719

126. Oyster Lease No. 3855 dated November 8, 1917, to Foret, Pelegrin & Bro. 735

127. Oyster Lease No. 9905 dated September 25, 1942, to A. St. Martin & Co. 736

128. Oyster Lease No. 2506 dated May 23, 1918, to Thompson & Nini 737

129. Oyster Lease No. 5757 dated February 17, 1925, to Alonzo Lee 739

130. Oyster Lease No. 7241 dated January 15, 1930, to Aelane Pitre 744

131. Oyster Lease No. 7053 dated July 13, 1929, to Matis Vidos 665

132. Oyster Lease No. 7039 dated July 5, 1929, to Louisiana Oyster & Fish Co. 666

133. Oyster Lease No. 6032 dated February 6, 1936, to Colsom & Rebeld 671

134. Oyster Lease No. 9337 dated September 29, 1939, to P. R. Norman & N. H. Breaux 667

135. Oyster Lease No. 8252 dated October 10, 1934, to P. R. Norman & N. H. Breaux 743

136. Oyster Lease No. 4061 dated August 14, 1918, to Louis Robardi 679

137. Oyster Lease No. 8251 dated October 16, 1934, to P. R. Norman & N. H. Breaux 763

138. Oyster Lease No. 8690 dated November 9, 1936, to P. R. Norman & N. H. Breaux 669

139. Oyster Lease No. 9338 dated September 29, 1939, to P. R. Norman & N. H. Breaux 670

140. Oyster Lease No. 7164 dated October 14, 1929, to Lester J. Boudreaux 678

141. Oyster Lease No. 4042 dated July, 1918, to Alvin Chauvin 672

142. Oyster Lease No. 7641 dated January 25, 1905, to Emelien Buras 703

143. Oyster Lease No. 7175 dated November 2, 1929, to Oliver Terrebonne 770

144. Oyster Lease No. 11869 dated April 20, 1949, to Frank & Vincent Bacala 745

145. Oyster Lease No. 7095 dated October 4, 1929, to Leo Pitre 769

146. Copy of certified copy of application for survey for oyster purposes and list dated October 9, 1914, by United Fish and Oyster Company affecting part of East Bay 12

147. Copy of certified copy of lease of water bottoms for oyster purposes from Louisiana Conservation Commission to United Fish and Oyster Company dated October 14, 1914, affecting acreage in East Bay 13

148. Copy of certified copy of application for survey and lease for oyster purposes dated October 9, 1914, by United Fish and Oyster Company to Louisiana Conservation Commission affecting acreage in East Bay 14

149. Copy of certified copy of lease of water bottoms for oyster purposes from Conservation Commissioner of Louisiana to United Fish and Oyster Company dated October 14, 1914, affecting coverage in East Bay 15

150. Copy of Survey Map for portions of East Bay for oyster bedding purposes for United Fish and Oyster Company 47

151. Copy of Survey Map for portions

of East Bay for oyster bedding purposes for United Fish and Oyster Company 51

152. Copy of certified copy of oyster lease map of South Pass and East Bay 46

153. Department of Conservation, State of Louisiana Survey showing location and area of Oyster Leases between South Pass and Southwest Pass, Plaquemines Parish, compiled under the direction of Frank T. Payne, Engr. 1921 1164

154. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Leases 48; 4,168; 249; 3400; 3257; 3401; 301; 315; 313; 317; 3420; 303; 335; 640; 3403; 3408; 3406; 3422; 3398 841

155. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Leases 349; 353; 386; 342; 334; 351; 348; 350; 346; 383; 384; 387; 382; 385; 388; 352; 341; 343; 347 842

156. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Leases 311; 314; 320 843

157. Part of map from records of Louisiana Wild Life and Fisheries

Commission showing location of Leases 321; 56; 321; 302; 296; 310 845

158. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Leases 42; 49; 43; 50; 2737 846

159. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Leases 11,639; 11,638; 11,640; 11,641; 11,637; 11,642; 14,461; 14,240 840

160. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Leases 7053; 7039; 6032; 9337; 8252; 4061; 8251; 8690; 9338A 844

161. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Leases 7164; 4042 847

162. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Leases 7641; 7175; 11,896; 7095; 7039; 7053 848

163. Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of Lease 18,330 838

164. Part of map from records of Louisiana Wild Life and Fisheries

Commission showing location of Leases 5,013 and 4,482 839

165. Report on Division of Oysters & Water Bottoms by James N. McConnell, Director from Second Biennial Report 1946 - 1947 229

166. Report of Division of Oysters & Water Bottoms by James N. McConnell, Director from Fourth Biennial Report 1950 - 1951 230

167. Report on Division of Oysters & Water Bottoms by James N. McConnell, Chief, from Sixth Biennial Report 1954-1955 231

VOLUME 4

168. Act 245 of 1910 45

169. Act 168 of 1912 44

170. Act 193 of 1916 43

171. Act 86 of 1918 42

172. Act 68 of 1920 41

173. Act 103 of 1926 40

174. Act 50 of 1932 39

175. Act 314 of 1940 38

176. Act 10 of Extra Session of 1940 37

177. Act 143 of 1942 36

178. Act 78 of 1946 35

179. Act 51 of 1948 34

180. Act 92 of 1956 33

181.	Copy of portion of Map of Louisiana attached to Act 452 of 1962	48
182.	Act 53 of 1958	32
183.	Act 452 of 1962	31
184.	Louisiana Revised Statutes 56: 491 through 526	30
185.	Gulf Coast Shrimp, Fish & Oyster Data September, 1954, United States Fish & Wildlife Service	227
186.	Examples of records of trials and arrest records from Louisiana Wild Life and Fisheries Commission	828
187.	Statement of W. S. Werlla	829
188.	Statement of James N. McConnell	830
189.	Statement of Julius L. Book dated December, 1956	831
190.	Statement of Julius L. Book dated November, 1956	832
191.	Statement of R. L. Eddy, Jr.	833
192.	Statement of Louis R. Cabirac	834
193.	Statement of J. C. DeArmas, Jr.	835
194.	Deposition of Captain Emanual Von Lubbe	1145
195.	Deposition of Samuel J. Nunez	1146
196.	Deposition of Landry Cheramie	1147
197.	Deposition of Chin Dy Hoy	1148
198.	Deposition of Abraham Schouest	1149

VOLUME 5

199.	Letter from W. S. Werlla dated February 2, 1948	274
200.	Enforcement Division from Second Biennial Report of the Department of Wild Life & Fisheries —1946 & 1947	275
201.	Division of Enforcement for 1954 & 1955 from Biennial Report of the Department of Wild Life & Fisheries	276
202.	Airplane Activity Report from Second Biennial Report of the Department of Wild Life & Fisheries —1946 & 1947	277
203.	Act 117 of 1855	232
204.	Act 13 of 1871	233
205.	Act 24 of 1910	234
206.	Act 132 of 1910	235
207.	Act 172 of 1910	236
208.	Act 196 of 1910	237
209.	Act 254 of 1910	238
210.	Act 183 of 1912	239
211.	Act 258 of 1912	240
212.	Act 42 of 1914	241
213.	Act 271 of 1914	242
214.	Act 30 of 1915	243
215.	Act 10 of 1916	244

216.	Act 20 of 1918	245
217.	Act 105 of 1918	246
218.	Act 106 of 1918	247
219.	Act 268 of 1918	248
220.	Act 250 of 1920	249
221.	Act 252 of 1924	250
222.	Act 253 of 1924	251
223.	Act 68 of 1932	252
224.	Act 206 of 1932	253
225.	Act 93 of 1936	254
226.	Act 210 of 1936	255
227.	Act 131 of 1934	256
228.	Act 225 of 1936	257
229.	Act 80 of 1938	258
230.	Act 77 of 1940	259
231.	Act 311 of 1940	260
232.	Act 153 of 1942	261
233.	Act 329 of 1948	262
234.	Act 227 of 1944	263
235.	Louisiana Revised Statutes 56: 311 through 415	264
236.	Distribution of Fishing Effort in Waters Outside the Coast Line of the Northern Gulf of Mexico with Special Reference to Shrimp	265
237.	Fishes Taken in the Menhaden	

Fishery of Alabama, Mississippi and Eastern Louisiana 266

238. Tables of Statistics from 1885 to 1956 267

239. Report by Bureau of Commercial Fisheries, United States Department of Interior, Fish & Wildlife Service, New Orleans, Louisiana, dated September 9, 1968 268

240. Report by H. Roger Hunter, Jr., dated December 13, 1956 269

241. United States Fish & Wildlife Service Tabulation of Commercial Landings of Fish and Shellfish at ports in Plaquemines Parish, dated September 9, 1968 270

242. Tabulations of Hunting Licenses Sold by Parishes 827

243. Herbert R. Padgett, "Some Physical and Biological Relationships to the Fisheries of the Louisiana Coast," in *The Professional Geographer* (September, 1966), pp. 423-439 271

244. Act 210 of 1946 272

245. Louisiana Revised Statutes R.S. 56:551 through 561 273

246. Refer the Court to Louisiana Revised Statutes 56:1-56:1623
9:1101
9:2791

14:217
15:48.1
30:211-216 1127

247. Act 11 of 1921 278

248. Refer the Court to Louisiana Exhibit 40 401

249. Act 52 of 1921 200

Exhibit 56 State Control Over Seismic Operations, as follows:

STATE CONTROL OVER SEISMIC OPERATIONS

CONTENTS

Description	*Louisiana Preliminary Identifying Number*
1. Act 77 of 1940	281
2. Act 152 of 1942	282
3. Act 175, Section 2 of 1954	283
4. Seismic Permit No. 2138 dated November 28, 1949	1069
5. Seismic Permit No. 1193 dated June 5, 1947	1070
6. Seismic Permit not numbered dated January 26, 1950	1071
7. Seismic Permit No. 2213 dated January 30, 1950	1072
8. Seismic Permit No. 2214 dated January 30, 1950	1073

9. Seismic Permit No. 1229 dated June 19, 1947 1074

10. Seismic Permit No. 1051 dated December 23, 1946 1075

11. Seismic Permit No. 2231 dated April 4, 1950 1076

12. Seismic Permit No. 2389 dated June 19, 1950 1077

13. Seismic Permit No. 17 dated January 30, 1941 1078

14. Seismic Permit No. 2363 dated July 17, 1950 1079

15. Seismic Permit No. 914 dated August 23, 1946 1080

16. Seismic Permit No. 900-R dated October 25, 1946 1081

17. Seismic Permit No. 1160 dated April 29, 1947 1082

18. Seismic Permit No. 1055 dated January 7, 1947 1083

19. Seismic Permit No. 1077 dated February 3, 1947 1084

20. Seismic Permit No. 535-R dated December 16, 1944 1085

21. Seismic Permit No. 606-R dated July 4, 1945 1086

22. Seismic Permit No. 1454 dated Jan. 13, 1948 1087

23. Seismic Permit No. 1372 dated November 21, 1947 1088

24. Seismic Permit No. 1385 dated December 4, 1947 1089

25. Seismic Permit No. 1421 dated December 29, 1947 1090

26. Seismic Permit No. 1363 dated November 13, 1947 1091

27. Seismic Permit No. 1365 dated November 13, 1947 1092

28. Seismic Permit No. 1452 dated January 13, 1948 1093

29. Seismic Permit No. 1515 dated February 27, 1948 1094

30. Seismic Permit No. 1778 dated November 8, 1948 1095

31. Seismic Permit No. 1558 dated April 6, 1948 1096

32. Seismic Permit No. 1808 dated December 22, 1948 1097

33. Seismic Permit No. 1809 dated December 22, 1948 1098

34. Seismic Permit No. 1080-R dated May 5, 1947 1099

35. Seismic Permit No. 1557 dated April 6, 1948 1100

36. Seismic Permit No. 1571 dated April 15, 1948 1101

37. Seismic Permit No. 1878 dated February 7, 1949 1102

38. Seismic Permit No. 1814 dated December 22, 1948 1103

39. Seismic Permit No. 1209 dated June 12, 1947 1104

40. Seismic Permit No. 1168 dated May 9, 1947 1105

41. Seismic Permit No. 1896 dated February 21, 1949 1106

42. Seismic Permit No. 1639 dated July 6, 1948 1107

43. Seismic Permit No. 1881, approved September 16, 1946, to the California Company 919

44. Seismic Permit No. 2512, approved April 13, 1948, to Shell Oil Company, Inc. 920

45. Seismic Permit No. 2512-R, approved April 13, 1949, to Shell Oil Company, Inc. 921

46. Seismic Permit No. 2512-R, approved April 13, 1949, to Shell Oil Company, Inc. 922

47. Seismic Permit No. 2090-R, approved July 28, 1947, to Shell Oil Company, Inc. 923

48. Seismic Permit No. 1521, approved November 13, 1945, to the California Company 924

49. Seismic Permit No. 2336, approved November 3, 1947, to the Texas Company 925

50. Seismic Permit No. 2348, approved November 24, 1947, to the California Company 926

51. Seismic Permit No. 4814, approved October 26, 1953, to Cities Service Oil Company 927

52. Seismic Permit No. 4999, approved March 23, 1954, to Cities Service Oil Company 928

53. Seismic Permit No. 2389, approved December 22, 1947, to Shell Oil Company, Inc. 929

54. Seismic Permit No. 3051, approved August 5, 1945, to Shell Oil Company, Inc. 930

55. Seismic Permit No. 2430, approved February 2, 1948, to General Geophysical Company 931

56. Seismic Permit No. 3046, approved August 3, 1949, to Shell Oil Company, Inc. 932

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Exhibit 57 Oyster Shell Leases, as follows:

OYSTER SHELL LEASES

CONTENTS

	Description	*Louisiana Preliminary Identifying Number*
1.	Act 42 of 1914	289
2.	R.S. 56:450 and 451	290

3. *The History and Regulation of the Shell Dredging Industry in Louisiana,* Compiled by the Louisiana Wild Life and Fisheries Commission (1968). 71

Exhibit 58 State Control Over Mineral Resources, as follows:

STATE CONTROL OVER MINERAL RESOURCES

CONTENTS

Description	*Louisiana Preliminary Identifying Number*
1. State Lease Number 749	481
2. State Lease Number 750	482
3. State Lease Number 751	483
4. State Lease Number 752	484
5. State Lease Number 753	485
6. State Lease Number 754	486
7. State Lease Number 755	487
8. State Lease Number 756	488
9. State Lease Number 1522	489
10. State Lease Number 1523	490
11. State Lease Number 746	491
12. State Lease Number 747	492
13. State Lease Number 749	493
14. State Lease Number 757	494
15. State Lease Number 758	495
16. State Lease Number 759	496

17. State Lease Number 760 497
18. State Lease Number 1395 498
19. State Lease Number 1396 499
20. State Lease Number 1397 500
21. State Lease Number 1398 501
22. State Lease Number 1399 502
23. State Lease Number 1521 503
24. State Lease Number 1798 504
25. State Lease Number 1799 505
26. State Lease Number 1800 506
27. State Lease Number 1801 507
28. State Lease Number 2812 508
29. State Lease Number 2813 509
30. State Lease Number 2814 510
31. State Lease Number 2815 511
32. State Lease Number 2816 512
33. State Lease Number 2817 513
34. State Lease Number 2818 514
35. State Lease Number 998 515
36. State Lease Number 999 516
37. State Lease Number 1007 517
38. State Lease Number 1008 518
39. State Lease Number 1009 519
40. State Lease Number 1010 520
41. State Lease Number 1011 521

42.	State Lease Number 1012	522
43.	State Lease Number 1388	523
44.	State Lease Number 2474	524
45.	State Lease Number 997	525
46.	State Lease Number 1000	526
47.	State Lease Number 1006	527
48.	State Lease Number 1013	528
49.	State Lease Number 1014	529
50.	State Lease Number 1015	530
51.	State Lease Number 2592	531
52.	State Lease Number 2665	532
53.	State Lease Number 2666	533
54.	State Lease Number 2667	534
55.	State Mineral Lease No. 335, 1936	1203
56.	State Mineral Lease No. 188, 1928	1204
57.	State Mineral Lease No. 192, 1928	1205
58.	State Mineral Lease No. 195, 1928	1206
59.	Refer the Court to a map which reflects information concerning areas affected by mineral leases granted by the State of Louisiana as reflected by the records of the Louisiana State Mineral Board since the period of the creation of that Board. It pertains to East Bay.	1064
60.	Refer the Court to an exhibit which reflects the same sort of information as does the exhibit bearing La. Preliminary Identifying Number	

	1064, except that it pertains to the Caillou Bay Area.	1065
61.	Map showing lease block locations in South Pass Area	898
62.	U. S. Department of the Interior, Geological Survey, Number, 1950, Mid Continent Map No. 1603	899
63.	Pertinent parts of Outer Continental Lease Maps of Louisiana, published by U. S. Department of the Interior, Bureau of Land Management	1150
64.	A map published by the Department of Conservation of the State of Louisiana entitled, Oil and Gas Map of Louisiana	1151
65.	Map showing lease block locations in Ship Shoal Area	900
66.	U. S. Department of the Interior Geological Survey; October, 1950, Mid Continent Map No. 1607, Ship Shoal Area	901
67.	Refer the Court to Louisiana Brief Exhibit Number 38	399
68.	Refer the Court to Louisiana Brief Exhibit Number 39	400
69.	List of well permits prior to 1956	279
70.	Cumulative well Completions and Footage Drilled	280

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Exhibit 59 Pollution Control, as follows:

POLLUTION CONTROL

CONTENTS

	Description	*Louisiana Preliminary Identifying Number*
1.	Act 68, Section 12 of 1932	284
2.	Act 367 of 1940	287
3.	Act 385, Section 12 of 1948	285
4.	Act 386, Section 12 of 1948	286
5.	Rules Governing Disposal of Waste Oil, Oil Field Brine, etc.	288
6.	Notes of Jack Hood and pollution regulations	836

Exhibit 60 Vita of Dr. Leo J. Bouchez

Exhibit 61-A First drawing or sketch by Dr. Leo J. Bouchez.

Exhibit 61-B Second drawing or sketch by Dr. Leo J. Bouchez.

Exhibit 62 Written opinion of Dr. Leo J. Bouchez, "The Changing Configuration of the Coast and the Law."

Exhibit 63 L. J. Bouchez, *The Regime of Bays in International Law*, A. W. Sythoff-Leyden (1964).

Exhibit 64 LPI 827-A—Data sheet compiled from Gulf Coast Shrimp Data of the U. S. Department of the Interior, on shrimp boat trips

Exhibit 65 Vita of J. Y. Christmas

Exhibit 66	LPI—Yu. A. Torin, "Oceanographic Conditions and Fishing in the Gulf of Mexico During Autumn and Winter," (Okeonologicheskie usloviya i promysel ryby v. Meksikanskom zalive v. oseene-zimii period), *in Trudy Atlanticheskogo Nauchno-Issledovatel' skogo Instituta Rybnogo Khozyaistva i Okeanografil Atlan-NIRO*), No. 11, p. 4-11 (1964)
Exhibit 67	LPI 841—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 48; 4,168; 249; 3400; 3257; 3401; 301; 315; 313; 317; 3420; 303; 335; 640; 3403; 3408; 3406; 3422; 3398.
Exhibit 68	LPI 46—Copy of certified copy of oyster lease map of South Pass and East Bay
Exhibit 69	LPI 846—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 52; 49; 43; 50; 2787
Exhibit 70	LPI 842—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 349; 353; 386; 342; 334; 351; 348; 350; 346; 383; 384; 387; 382; 385; 388; 352; 341; 343; 347
Exhibit 71	LPI 839—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 5013 and 4482.

Exhibit 72	LPI 843—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 311; 314; 320
Exhibit 73	LPI 845—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 321; 56; 321; 302; 296; 310
Exhibit 74	LPI 844—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 7053; 7039; 6032; 9337; 8252; 4061; 8251; 8690; b338
Exhibit 75	LPI 847—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 7164; 4042
Exhibit 76	LPI 848—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 7641; 7175; 11,896; 7095; 7039; 7053
Exhibit 77	LPI 838—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of lease 18,330
Exhibit 78	LPI 840—Part of map from records of Louisiana Wild Life and Fisheries Commission showing location of leases 11,639; 11,638; 11,640; 11,-641; 11,637; 11,642; 14,461; 14,240
Exhibit 79	Louisiana Oyster Lease No. 334

Exhibit 80	Louisiana Oyster Lease No. 18330
Exhibit 81	Louisiana Oyster Lease No. 301
Exhibit 82	Louisiana Oyster Lease No. 654
Exhibit 83	Louisiana Oyster Lease No. 5013
Exhibit 84	Louisiana Oyster Lease No. 4482
Exhibit 85	Louisiana Oyster Lease No. 3257
Exhibit 86	LPI 1222—Certified copies of parts of the file of State Mineral Lease 579
Exhibit 87	LPI 1223—Certified copies of parts of the file of State Mineral Lease 580
Exhibit 88	LPI 1221—Certified copies of parts of the file from State Mineral Lease 335
Exhibit 89	LPI 1220—Certified copies of documents comprising parts or portions of the file, State Mineral Lease 195
Exhibit 90	LPI 1219—Certified copies of documents comprising parts of the file, State Land Lease 192
Exhibit 91	LPI 1218—Certified copies of documents comprising parts or portions of the file of the State Mineral Lease 188
Exhibit 92	LPI 1217—Certified copies of excerpts from index book at the State Land Office of Louisiana pertaining to State Mineral Lease Nos. 188, 192, 195, 335, 579 and 580

Exhibit 93 LPI 1170 through 1176 as follows:
LPI 1170—Plat of T. 22 and 23 S., R. 32 E., Louisiana Meridian, approved Sept. 25, 1875
LPI 1171—Plat of T. 22 S., R. 32 E. Louisiana Meridian, approved December 8, 1842
LPI 1172—Plat of T. 21 and 22 S., R. 19 E. St. Helena meridian, approved July 16, 1832
LPI 1173—Plat of T. 24 S., R. 32 and 33 E. Louisiana meridian, approved Sept. 25, 1875
LPI 1174—Plat of T. 22 S., R. 31 E., Louisiana meridian, approved December 8, 1842
LPI 1175—Plat of T. 24 S., R. 30 and 31 E., Louisiana meridian, approved May 18, 1842
LPI 1176—Plat of T. 23 S., R. 31 and 32 E. Louisiana meridian, approved Dec. 8, 1842

Exhibit 94 LPI 1184—Copy of quadrangle map entitled "South Pass Quadrangle"

Exhibit 95 LPI 1064—This is a map which reflects information concerning areas affected by mineral leases granted by the State of Louisiana as reflected by the records of the Louisiana State Mineral Board since the period of the creation of that Board. It pertains to East Bay.

Exhibit 96 LPI 1065--This exhibit reflects the same sort of information as does the

exhibit bearing Louisiana Preliminary Identifying Number 1064, except that it pertains to the Caillou Bay area

Exhibit 97 LPI 1025—Map showing outer limit of areas claimed as the minimum extent of inland waters Louisiana would be entitled to under issues 1A through E

Exhibit 98 LPI 1027—Maps and other materials showing location of Inland Water Lines designated and defined under the Act of February 19, 1895

Exhibit 99 LPI 53—Copy of Chart No. 194, Edition 8, date, September, 1901.

Exhibit 100 LPI 899—U. S. Department of the Interior, Geological Survey, November, 1950, Mid Continent Map No. 1603

Exhibit 101 LPI 901—U. S. Department of the Interior, Geological Survey; October, 1950, Mid Continent Map No. 1607, Ship Shoal Area

Exhibit 102 LPI 900—Map showing lease block locations in Ship Shoal Area

Exhibit 103 LPI 898—Map showing lease block locations in South Pass area

Exhibit 104 LPI 1059—This exhibit contains a collection of cartographic materials relating to the Ascension-Barataria Bay area 7 and 10 of the statement of issues. It shows possible overlarge

closing lines and related contentions of Louisiana, plus alternative contentions of Louisiana within this area; and related data

Exhibit 105 Page 2 of Biennial Report of State Mineral Board dated June, 1950

Exhibit 106 LPI 336—Report of John Jay to the President of Congress from Madrid, May 26, 1780, letter dated May 11, 1780, pp. 722-725

Exhibit 107 LPI 337—Communications of the Honorable the French Minister to a Committee of Congress at a Second Conference, February 2, 1780, pp. 488-490

Exhibit 108 LPI 335—Proceedings of Congress as to conditions of pacification and particularly as to the Mississippi and Fisheries, February 23, 1779, pp. 58-61

Exhibit 109 LPI 338—Congress—Proceedings as to the Conditions of Pacification and particularly as to the Mississippi and the Fisheries, September 17, 1779, pp. 324-326

Exhibit 110 LPI 340—Vol. IV, John Jay to the President of Congress, November 6, 1780, excerpt pp. 134-138

Exhibit 111 LPI 339—Vol. IV, Letter of Benjamin Franklin to John Jay, October 2, 1780, pp. 74-76

Exhibit 112 LPI 341—Vol. IV, John Jay to the

President of Congress, October 3, 1781, excerpt pp. 742-745

Exhibit 113 LPI 348—*The Debates and Proceedings of the Congress of the United States* with an appendix containing important state papers and public documents and all the laws of a public nature. 7th Congress, 2nd Session from December 6, 1802, to March 3, 1803, Vol. 12, Washington: Gale & Seaton, 1851. Mr. Madison to Charles Pinckney, November 27, 1802, pp. 1058-1059

Exhibit 114 LPI 351—*The Debates and Proceedings of the Congress of the United States* with an appendix containing important state papers and public documents and all the laws of a public nature. 7th Congress, 2nd Session from December 6, 1802, to March 3, 1803, Vol. 12, Washington: Gale & Seaton, 1851. The Purchase of Louisiana, January 1803, pp. 370-374

Exhibit 115 LPI 345—*American State Papers, Documents, Legislative and Executive, of the Congress of the United States*, from the 1st Session of the 1st to the 3rd Session of the 13th Congress, inclusive: commencing March 3, 1789 and ending March 3, 1815. Walter Lowrie, & Matthew St. Clair Clarke, eds., Foreign Relations, Vol. II, Washington: Published by Gale & Seaton, 1832, No. 18 France

and Spain—Louisiana 7th Congress, 2nd Session Robert R. Livingston to the Secretary of State No. 3, January 7, 1802, pp. 536-537. Footnote in book: "The date should, no doubt, be 1803."

Exhibit 116 LPI 355—H. A. Washington, *The Writings of Thomas Jefferson, Volume IV*, Taylor & Maury, (1854) pp. 456-460. Letter to M. Dupont, February 1, 1803.

Exhibit 117 LPI 354—Treaty for the Cession of Louisiana, April 30, 1803, 8 Stat. 200-7.

Exhibit 118 LPI 352—*The Debates and Proceedings of the Congress of the United States*, Eleventh Congress, Third Session, December 3, 1810 to March 3, 1811, Washington: Gales & Seaton, 1853. "An act to enable the people of the Territory of Orleans to form a constitution and State Government, and for the admission of such State into the Union, on an equal footing with the original states and for other purposes," pp. 1326-8

Exhibit 119 LPI 353—*The Debates and Proceedings of the Congress of the United States*, Twelfth Congress, First Session, November 4, 1811 to July 6, 1812, Washington: Gales & Seaton, 1853. "An act for the admission of the State of Louisiana into the Union

	and to extend the laws of the U. S. to the said State," pp. 2264-2266
Exhibit 120	Map 4 of 8 of the Set of 54 maps
Exhibit 120-A	Map 5 of 8 of the Set of 54 maps
Exhibit 120-B	Map 6 of 8 of the Set of 54 maps
Exhibit 121	Photograph album of Curtis L. Buttorff, containing the following series of photographs:

Description of Louisiana Exhibit 121—Series of Photographs

1. 902-22; LPI 992; Corps of Engineers; 3 October 1929
   902-68; LPI 994; Corps of Engineers; 3 October 1929
2. INO-1-157; Corps of Engineers; 14 October 1940
3. 20V311RWM1063; United States Exhibit; 1 October 1946
4. M-17-88-3; Corps of Engineers; 5 June 1949
5. 724-193; United States Exhibit; 1 July 1954
6. 24-116; LPI 537; Corps of Engineers; 29 February 1956
7. L596; C. & G. S.; 23 October 1956
8. L6948; C. & G. S.; 11 October 1958
9. 144; LPI 544; Corps of Engineers; 8 November 1959
10. L8728; C. & G. S.; 30 November 1959
11. L9121; C. & G. S.; 7 December 1959
12. O932; C. & G.S.; 23 October 1956

13. 61; LPI 546; Corps of Engineers; 13 October 1960
    62; LPI 547; Corps of Engineers; 13 October 1960
14. 112; LPI 550; Corps of Engineers; 17 October 1961
15. 75; Corps of Engineers; 23 November 1962
16. 5-1032; Corps of Engineers; 18 September 1965
17. S8995; C. & G.S.; 8 October 1965
18. 6-12; Source unknown; 23 February 1967
19. 59-61; LPI 562; Corps of Engineers; 15 November 1969
20. E4977; C. & G. S.; 30 January 1970
21. 4873; C. & G.S.; 24 January 1970
22. 8181R; C. & G. S.; 24 January 1970
23. 8281R; C. & G. S.; 30 January 1970

Exhibit 121-A Dr. James P. Morgan overlay of Figure 2 from Exhibit 6

Exhibit 121-B Photos—Stereo Partners, as follows:

Louisiana Exhibit 121B—Series of Photographs

1. INO-1-158; Corps of Engineers
2. 24 January 1970; L8182R; C. & G. S.
3. 30 January 1970; E4976; C. & G. S.
4. 30 November 1959; L8727; C. & G. S.
5. 7-59-145; Corps of Engineers; LPI 545
6. 30 January 1970; L8280R; C. & G. S.
7. 15 November 1969; 59-64; Corps of Engineers; LPI 564

8. 6-61-113; Corps of Engineers; LPI 551
9. 23 October 1956; L595; C. & G. S.
10. 9-60-61; Corps of Engineers; LPI 546
11. 1 October 1946; 21V311RWM1063 16PS 6P183
12. 18 September 1965; 5-1031; Corps of Engineers
13. 12-62-74; Corps of Engineers
14. 29 February 1956; 24-115 P-55; Corps of Engineers; LPI 536
15. 1-7-54; 724-192; Corps of Engineers
16. 8 October 1965; S8996; C. & G. S.
17. 1-7-54; 724-192; Corps of Engineers

Exhibit 122 1895 Chart No. 194

Exhibit 123 LPI-1144, Depositions of Dr. A. Joseph Wraight and Mr. James F. Richardson

E X H I B I T S

W-1 October 3, 1969, letter to Mr. Frederick W. Ellis from Wraight
RW-2 May 26, 1969, Chart No. 1272 (with markings)
R-1 October 29, 1935, Chart No. 1272, see Exh. 164
R R-2 H-6172
R R-3 H-6513
R R-4 H-6492 (copy of portion)
R R-5 H-6492 (film 1:30,000)
R R-6 T-5407
R R-7 May 26, 1969, Chart No. 1272 (clean)

Exhibit 124	December 6, 1969, edition of Chart No. 1272
Exhibit 125	LPI 1010—Copy of letter and report from Mr. Leo W. Hough, State of Louisiana, Department of Conservation, Louisiana Geological Survey, dated July 31, 1970
Exhibit 126	Drilling Activity in East Bay and Caillou Bay before Interim Agreement of October 12, 1956
Exhibit 127-A	C. & G. S. Photo No. L-9090, 7 December 1959
Exhibit 127-B	C. & G. S. Photo No. L-9091, 7 December 1959
Exhibit 127-C	C. & G. S. Photo No. L-9092, 7 December 1959
Exhibit 128-A	C. & G. S. Photo No. L-8987, 3 December 1959
Exhibit 128-B	C. & G. S. Photo No. L-8988, 3 December 1959
Exhibit 129-A	C. & G. S. Photo No. L-9031, 3 December 1959
Exhibit 129-B	C. & G. S. Photo No. L-9032, 3 December 1959
Exhibit 129-C	C. & G. S. Photo No. L-9033, 3 December 1959
Exhibit 129-D	C. & G. S. Photo No. L-9034, 3 December 1959
Exhibit 130	Affidavit by Mr. Frank J. Williams

	identifying Sheet 38 of Louisiana Exhibit 21
Exhibit 131	Overlay of right inset on Chart No. 1272 introduced as Exhibit 8
Exhibit 132	Illustrative sketch of seasonal mud-lump growth process
Exhibit 133	LPI 1057—Alternative methods of planimetering area of an indentation are graphically illustrated on this exhibit
Exhibit 134	LPI 1198—Photo Mosaic—Copies of documents in connection with our answers and objections to the First Formal Interrogatories of the United States and the related Requests for Admissions in globo
Exhibit 134-A	Mosaic 21
Exhibit 134-B	Mosaic 22
Exhibit 134-C	Mosaic 23
Exhibit 134-D	Mosaic 24
Exhibit 134-E	Mosaic 25
Exhibit 134-F	Mosaic 26
Exhibit 135	LPI 360—Samuel H. Lockett, *Louisiana As It Is*. Baton Rouge: Louisiana State University Press (1969). The original manuscripts of this geological survey were written in 1876 and 1891.
Exhibit 136	LPI 1011 - Copy of picture of Southwest Pass on wall at Lou-

isiana State University School of Geoscience

Exhibit 137 LPI 55 - Copy of a letter from the Liddell (Moses St. John R. and Family) Papers in the Department of Archives and Manuscripts of Louisiana State University

Exhibit 138 LPI 56 - Copy of page from the "Daily Picayune" of Thursday morning, August 14, 1856, obtained from Library of Louisiana State University

Exhibit 139 LPI 57 - Copy of page from the "Daily Picayune" of Friday morning, August 15, 1856, obtained from Library of Louisiana State University

Exhibit 140 LPI 58 - Copy of page from the "Daily Picayune" of Saturday morning, August 16, 1856, obtained from Library of Louisiana State University

Exhibit 141 LPI 59 - Copy of page from the "Daily Picayune" of Saturday morning, August 16, 1856, obtained from Library of Louisiana State University

Exhibit 142 LPI 60 - Copy of page from the "Daily Picayune" of Monday afternoon, August 18, 1856, obtained from Library of Louisiana State University

Exhibit 143	LPI 61 - Copy of page from the "Daily Picayune" of Wednesday morning, August 20, 1856, obtained from Library of Louisiana State University
Exhibit 144	LPI 62 - Copy of page from the "Daily Picayune" of Wednesday morning, August 20, 1856, obtained from Library of Louisiana State University
Exhibit 145	LPI 1146 - Deposition of Mr. Samuel J. Nunez
Exhibit 146	LPI 1148 - Deposition of Mr. Chin D. Hoy
Exhibit 147	LPI 1149 - Deposition of Mr. Abraham Schouest
Exhibit 148	LPI 1144 - Deposition of Mr. Samuel Von Lubbe
Exhibit 149	LPI 1147 - Deposition of Mr. Landry Cheramie
Exhibit 150	All of Louisiana's Requests for Admissions and Interrogatories and Answers thereto directed to the United States.
Exhibit 151	LPI 903 - Pertinent parts of 1887 map of the Alluvial Valley of the Mississippi River
Exhibit 152	LPI 358 - *Sovereignty of the Sea*, U. S. Department of State, Geographic Bulletin No. 3 (April, 1965)

Exhibit 153	LPI 359 - *Sovereignty of the Sea*, U. S. Department of State, Geographic Bulletin No. 3, rev. (October, 1969)
Exhibit 154	LPI 1132 - Whiteman, *Digest of International Law*, Vol. 4, U. S. Dept. State No. 7825 (April, 1965)
Exhibit 155	LPI 1142 - U. S. Coast & Geodetic Survey Chart No. 1
Exhibit 156	LPI 1137 - Willard Bascom, WAVES AND BEACHES: THE DYNAMICS OF THE OCEAN SURFACE, Doubleday & Co., Inc. (1964)
Exhibit 157	LPI 897 - Map of Survey of the United States Coast, Section VIII, made in 1853 by F. H. Gerdes
Exhibit 158	LPI 1 - Nautical Chart No. 94, 3rd Edition, Published June, 1877, by U.S.C.&G.S.
Exhibit 159	LPI 2 - Nautical Chart No. 194, 13th Edition, Published December 20, 1918, by U.S.C.&G.S.
Exhibit 160	LPI 3 - Nautical Chart No. 194, 15th Edition, Published November 19, 1924, by U.S.C.&G.S.
Exhibit 161	LPI 4 - Nautical Chart No. 1272, 1st Edition, Published February 12, 1925, by U.S.C.&G.S.
Exhibit 162	LPI 5 - Nautical Chart No. 1272, 3rd Edition, Published January 11, 1933, by U.S.C.&G.S.

Exhibit 163	LPI 6 - Nautical Chart No. 1272, 5th Edition, Published September 28, 1934, by U.S.C.&G.S.
Exhibit 164	LPI 7 - Nautical Chart No. 1272, 6th Edition, Published October 29, 1935, by U.S.C.&G.S.
Exhibit 165	LPI 8 - Nautical Chart No. 1272, 7th Edition, Published April 1, 1944, by U.S.C.&G.S.
Exhibit 166	LPI 9 - Nautical Chart No. 1272, 9th Edition, Published March 31, 1947, by U.S.C.&G.S.
Exhibit 167	LPI 10 - Nautical Chart No. 1272, 9th Edition, Published August 22, 1955, by U.S.C.&G.S.
Exhibit 168	LPI 11 - Nautical Chart No. 1272, 9th Edition, Published September 17, 1956, by U.S.C.&G.S.
Exhibit 169	LPI 52 - Copy of Chart No. 94, Edition 1, date, 1873
Exhibit 170	LPI 54 - Copy of Chart No. 194, Edition 10, dated July, 1910
Exhibit 171	LPI 291 - Photostatic copy of Connelly Field Notes
Exhibit 172	LPI 292 - Letter from Mr. Seymour Lowman, Assistant Secretary of the Treasury to the Secretary of State, dated June 4, 1929
Exhibit 173	LPI 1214 - Edward W. Orton, "A Geological Study of Marsh Island, Iberia Parish, Louisiana," Techni-

cal Report of Louisiana Wild Life and Fisheries Commission (1959)

Exhibit 173-A Attachments to Exhibit 173 - LPI 1214

Exhibit 174 LPI 293 - 1940, Chart No. 2, p. 1 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 294 - 1941, Chart No. 2, p. 1 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 295 - 1942, Chart No. 2, p. 1 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 296 - 1943, Chart No. 2, p. 1 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 297 - 1944-1945, Chart No. 2, p. 3 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 298 - 1946, Chart No. 2, p. 3 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 299 - 1947, Chart No. 2, p. 3 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 300 - 1948, Chart No. 2, p. 3 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 301 - 1949, Chart No. 2, p. 3 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 302 - 1950, Chart No. 2, p. 5 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 303 - 1951, Chart No. 2, p. 5 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 304 - 1952, Chart No. 4, p. 7 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 305 - 1953, Chart No. 4, p. 10 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 306 - 1954, Chart No. 4, p. 10 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 307 - 1955, Chart No. 4, p. 9 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 308 - 1956, Chart No. 190, p. 158 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 309 - 1957, Chart No. 195, p. 158 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 310 - 1958, Chart No. 200, p. 160 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 311 - 1959, Chart No. 206, p. 160 from charts of the U. S. Bureau of the Census, *Statisticcl Abstract of the United States*

LPI 312 - 1960, Chart No. 206, p. 160 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 313 - 1961, Chart No. 212, p. 161 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 314 - 1962, Chart No. 220, p. 170 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 315 - 1963, Chart No. 226, p. 173 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 316 - 1964, Chart No. 228, p. 169 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 317 - 1965, Chart No. 232, p. 168 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 318 - 1966, Chart No. 242, p. 171 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 319 - 1967, Chart No. 252, p. 174 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 320 - 1968, Chart No. 245, p. 167 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 321 - 1969, Chart No. 243, p. 163 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

Exhibit 175

LPI 322 - 1956, Chart No. 192, p. 159 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 323 - 1957, Chart No. 197, p. 159 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 324 - 1958, Chart No. 202, p. 161 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 325 - 1959, Chart No. 207, p. 161 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 326 - 1960, Chart No. 208, p. 161 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 327 - 1961, Chart No. 214, p. 162 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 328 - 1962, Chart No. 222, p. 171 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 329 - 1963, Chart No. 228, p. 174 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 330 - 1964, Chart No. 230, p. 170 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

LPI 331 - 1965, Chart No. 234, p. 169 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*

	LPI 332 - 1966, Chart No. 244, p. 172 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*
	LPI 333 - 1967, Chart No. 254, p. 175 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*
	LPI 334 - 1968, Chart No. 248, p. 169 from charts of the U. S. Bureau of the Census, *Statistical Abstract of the United States*
Exhibit 176	LPI 1212 - G. Etzel Pearcy, "Measurement of the United States Territorial Sea," *Department of State Bulletin*, No. 1044 (June 29, 1959)
Exhibit 177	LPI 1131 - E. L. Corthell, *A History of the Jetties at the Mouths of the Mississippi River*, New York: John Wiley and Sons, 2d ed. (1881).
Exhibit 178 (Accession file)	LPI 918 - File from records of United States Coast & Geodetic Survey treated in 1 Shalowitz *Shore & Sea Boundaries*
Exhibit 178-A	Copies of correspondence re Acc. File
Exhibit 179	Pages 503 through 507 of Humphrey and Abbot, Appendix A
Exhibit 180	LPI 1055 - This exhibit also pertains to East Bay and contains data and measurement information

associated with various maps of the period 1918 through the 1960's. The various components of the exhibit also reflect alternative natural entrance points and measurement data related to certain land forms not treated in the exhibit identified by Louisiana Preliminary Identifying No. 1054

Exhibit 181-A	Chart 1272, 21st Edition
Exhibit 181-B	Chart 1273, 9th Edition
Exhibit 181-C	Chart 1274, 10th Edition
Exhibit 181-D	Chart 1275, 1970 Edition
Exhibit 182-A	LPI 73 - Color Photograph - Photo No. TL-13 dated June 26, 1969
Exhibit 182-B	LPI 74 - Color Photograph - Photo No. TL-14 dated June 26, 1969
Exhibit 182-C	LPI 83 - Color Photograph - Photo No. T-36 dated June 26, 1969
Exhibit 182-D	LPI 86 - Color Photograph - Photo No. TL-39 dated June 26, 1969
Exhibit 182-E	LPI 94 - Color Photograph - Photo No. TL-51 dated June 26, 1969
Exhibit 182-F	LPI 101 - Color Photograph - Photo No. TL-65 dated August 27, 1969
Exhibit 182-G	LPI 103 - Color Photograph - Photo No. TL-83 dated August 27, 1969
Exhibit 182-H	LPI 106 - Color Photograph - Photo No. TL-97 dated August 27, 1969

Exhibit 182-I	LPI 107 - Color Photograph - Photo No. TL-99 dated August 27, 1969
Exhibit 182-J	LPI 108 - Color Photograph - Photo No. TL-100 dated August 27, 1969
Exhibit 182-K	LPI 109 - Color Photograph - Photo No. TL-101 dated August 27, 1969
Exhibit 182-L	LPI 110 - Color Photograph - Photo No. TL-102 dated August 27, 1969
Exhibit 182-M	LPI 111 - Color Photograph - Photo No. TL-113 dated August 27, 1969
Exhibit 182-N	LPI 114 - Color Photograph - Photo No. TL-116 dated August 27, 1969
Exhibit 182-O	LPI 115 - Color Photograph - Photo No. TL-117 dated August 27, 1969
Exhibit 182-P	LPI 126 - Color Photograph - Photo No. TL-136 dated August 27, 1969
Exhibit 182-Q	LPI 130 - Color Photograph - Photo No. TL-142 dated August 27, 1969
Exhibit 182-R	LPI 138 - Color Photograph - Photo No. TL-193 dated September 3, 1969
Exhibit 182-S	LPI 139 - Color Photograph - Photo No. TL-196 dated September 3, 1969
Exhibit 182-T	LPI 141 - Color Photograph - Photo No. TL-202 dated September 3, 1969
Exhibit 182-U	LPI 142 - Color Photograph - Photo No. TL-204 dated September 3, 1969

Exhibit 182-V	LPI 153 - Color Photograph - Photo No. TL-217 dated September 3, 1969
Exhibit 182-W	LPI 155 - Color Photograph - Photo No. TL-219 dated September 3, 1969
Exhibit 182-X	LPI 156 - Color Photograph - Photo No. TL-220 dated September 3, 1969
Exhibit 182-Y	LPI 157 - Color Photograph - Photo No. TL-213 dated September 3, 1969
Exhibit 182-Z	LPI 159 - Color Photograph - Photo No. TL-225 dated September 3, 1969
Exhibit 182-AA	LPI 161 - Color Photograph - Photo No. TL-227 dated September 3, 1969
Exhibit 182-AB	LPI 162 - Color Photograph - Photo No. TL-228 dated September 3, 1969
Exhibit 182-AC	LPI 164 - Color Photograph - Photo No. TL-230 dated September 3, 1969
Exhibit 182-AD	LPI 165 - Color Photograph - Photo No. TL-231 dated September 3, 1969
Exhibit 182-AE	LPI 166 - Color Photograph - Photo No. TL-232 dated September 3, 1969
Exhibit 182-AF	LPI 169 - Color Photograph - Photo

No. TL-241 dated September 3, 1969

Exhibit 182-AG LPI 171 - Color Photograph - Photo No. TL-244 dated September 3, 1969

Exhibit 182-AH LPI 172 - Color Photograph - Photo No. TL-245 dated September 3, 1970

Exhibit 182-AI LPI 173 - Color Photograph - Photo No. TL-246 dated September 3, 1969

Exhibit 182-AJ LPI 174 - Color Photograph - Photo No. TL-247 dated September 3, 1969

Exhibit 182-AK LPI 179 - Color Photograph - Photo No. TL-264 dated October 2, 1969

Exhibit 182-AL LPI 181 - Color Photograph - Photo No. TL-266 dated October 2, 1969

Exhibit 182-AM LPI 609 - Photograph - TL-O(32) 2 dated June 24, 1967, Jetties at mouth of Belle Pass outlet of Bayou LaFourche

Exhibit 182-AN LPI 610 - Photograph - TL-O(34) 1 dated June 24, 1967, Ground view showing exhumed marsh in retreating beach area, Timbalier Island, Louisiana

Exhibit 182-AO LPI 953 - Photograph by Dr. James P. Morgan of different parts of the Louisiana coastal area

Exhibit 182-AP	LPI 1005 - Photograph from the files of Dr. James P. Morgan
Exhibit 183	**NOTE: EXHIBIT 183-A THROUGH 183-V WERE WITHDRAWN. THEY APPEAR IN LOUISIANA EXHIBIT 21.**
Exhibit 183-W	LPI 959 - Photograph TL-284 dated October 2, 1969. Different parts of the Louisiana coastal area
Exhibit 183-X	LPI 973 - Photograph TL-299 dated October 2, 1969. Different parts of the Louisiana coastal area
Exhibit 183-Y	LPI 988 - Photograph TL-283 dated October 2, 1969. Different parts of the Louisiana coastal area
Exhibit 183-Z	LPI 991 - Photograph TL-287 dated October 2, 1969. Different parts of the Louisiana coastal area
Exhibit 184-A	LPI 611 - Photograph M-100-8 dated June 26, 1969, View Southwest showing mouth of Pass Tante Phine
Exhibit 184-B	LPI 612 - Photograph M-100-10 dated June 26, 1969, View west showing peninsula extending south toward mouth of Pass Du Bois
Exhibit 184-C	LPI 613 - Photograph M-100-12 dated June 26, 1969, View toward the Northwest showing the west end of Pass Du Bois and the peninsula to the north

Exhibit 184-D LPI 614 - Photograph M-100-13 dated June 26, 1969, View looking southwest along the sand spit on the east side of Southwest Pass, Mississippi Delta

Exhibit 184-E LPI 615 - Photograph M-100-15 dated June 26, 1969, Mouth of South Pass, Mississippi Delta. Sand spit, mudlump islands No. 89-90 and new smaller lumps shown in the foreground View toward the north

Exhibit 184-F LPI 616 - Photograph M-101-4 dated June 26, 1969, South Pass mudlumps and sand spit, Mississippi Delta. Mudlump 93 on left of photo. Mudlump 89-90 in the central part of photo and new mudlumps offshore in right central part of photo. The distinct fresh water-salt water boundary line shown in the foreground

Exhibit 184-G LPI 619 - Photograph M-101-7 dated June 26, 1969, Mouth of Southeast Pass, Mississippi Delta, and mudlump islands in right middle ground. View toward the north.

Exhibit 184-H LPI 620 - Photograph M-101-8 dated June 26, 1969, Balize Peninsula in the background and Balize Bayou mudlumps in the foreground. View looking generally north.

Exhibit 184-I LPI 621 - Photograph M-101-12 dated June 26, 1969, View toward the northwest showing the mouth of Pass A Loutre in the background and Pass A Loutre mudlumps in the foreground

Exhibit 184-J LPI 622 - Photograph M-101-16 dated June 26, 1969, View toward the north, showing a crevasse or splay extending into Blind Bay from the south side of Pass A Loutre, Mississippi Delta

Exhibit 184-K LPI 623 - Photograph M-103-13 dated September 3, 1969, View west showing breaches in the sand spit on the east side of Southwest Pass, Mississippi Delta

Exhibit 184-L LPI 624 - Photograph M-103-16 dated September 3, 1969, View north showing the north end of the sand spit on the east side of Southwest Pass, Mississippi Delta

Exhibit 184-M LPI 625 - Photograph M-104-5 dated September 3, 1969, View toward the northwest showing the marsh on the west side of South Pass, Mississippi Delta. See M-104-6 for comparison.

Exhibit 184-N LPI 626 - Photograph M-104-6 dated September 3, 1969, View northwest showing marsh on the west side of South Pass, Missis-

sippi Delta. Compare with M-104-5

Exhibit 184-O LPI 627 - Photograph M-104-10 dated September 3, 1969, View northeast showing the marsh and natural levees on the west side of South Pass. Note small residual islands in foreground of photograph

Exhibit 184-P LPI 628 - Photograph M-104-11 dated September 3, 1969, Natural levee and marsh along west bank of South Pass, Mississippi Delta. View toward the northeast showing small residual islands in foreground of photograph

Exhibit 184-Q LPI 629 - Photograph M-104-12 dated September 3, 1969, Natural levee and marsh along west bank of South Pass, Mississippi Delta. View toward the northeast showing small residual islands in foreground of photograph

Exhibit 184-R LPI 630 - Photograph M-104-15 dated September 3, 1969, View toward the west showing the mouth of Southwest Pass and sand spit extending into East Bay, Mississippi Delta

Exhibit 184-S LPI 631 - Photograph M-104-16 dated September 3, 1969, View toward the west showing the natural levees of Southwest Pass near its

mouth and the sand spit extending into East Bay, Mississippi Delta. A photograph showing more detail than M-104-15, including breaches in sand spit caused by Hurricane Camille

Exhibit 184-T LPI 632 - Photograph M-105-1 dated October 2, 1969, View toward the south of a portion of Isle Derniere, Terrebonne Parish, Louisiana. The inlet in Isle Derniere shown in the center of the photograph is Coupe Colin

Exhibit 184-U LPI 639 - Photograph M-105-10 dated October 2, 1969, View toward the south showing the marsh and shore line of north shore of Caillou Bay. Note shell material is concentrated in small pockets along the shore line

Exhibit 184-V LPI 641 - Photograph M-105-12 dated October 2, 1969, View toward the north of marsh land extending inland from Isle Derniere. This view is in the opposite direction from M-105-11

Exhibit 184-W LPI 643 - Photograph M-105-16 dated October 2, 1969, View toward the east showing the junction of Bayou Grande Caillou and Bayou du Lac, Terrebonne Parish

Exhibit 184-X LPI 645 - M-53-36

Exhibit 184-Y	LPI 646 - M-94-2 dated July 26, 1961
Exhibit 185-A	LPI 1058-A This exhibit pertains to shore line changes in the Isle Derniere area for the period 1853 through 1959, as reflected by various maps or surveys of that period
Exhibit 185-B	LPI 1058-B - This exhibit pertains to shore line changes in the Caillou Bay-Lake Pelto area for the period 1853 through 1959, as reflected by various maps or surveys of that period
Exhibit 186	LPI 903 - Pertinent parts of 1887 map of the Alluvial Valley of the Mississippi River in overlay form
Exhibit 187	Chart 1050 in overlay form
Exhibit 188-A	LPI 1066-A - This exhibit reflects certain island measurement information pertaining to islands and low water elevations in the Derniere area
Exhibit 188-B	LPI 1066-B - This exhibit reflects certain island measurement information pertaining to islands and low water elevations in the Shell Keys area.
Exhibit 189	LPI 1063 - This is a collection of reduced scale nautical charts with an index map. The nautical charts included in the exhibit from which the reduced scale copies were made

for convenience in handling are charts 1268 through 1277, inclusive.

Exhibit 190 Photograph Album No. 4 of Dr. James P. Morgan, as follows:

LIST OF PHOTOGRAPHS TO ACCOMPANY TESTIMONY OF JAMES P. MORGAN CONCERNING PHYSICAL CHARACTERISTICS OF ISLE DERNIER AND CAILLOU BAY.

(All of the photographs included here were taken by James P. Morgan on the dates indicated).

PART I—COLOR PHOTOGRAPHS

Chronologic Number of Photograph	*Louisiana Preliminary Identifying Number*	*Date of Photography*	*Description of Photograph*
1	606	June 24, 1967	View west down beach of Isle Derniere, Terrebonne Parish, Louisiana.
2	175	October 2, 1969	View north across Trinity Bay, eastern Isle Derniere, Terrebonne Parish, Louisiana.
3	176	October 2, 1969	View north across central Isle Derniere, Caillou Boca in middle ground.
4	177	October 2, 1969	View northward across central Isle Derniere. Caillou Boca in middle ground.

5	978	October 2, 1969	View looking southwest toward western Isle Derniere with Caillou Boca in foreground marshland of old Bayou MiSale extending out toward island.
6	987	October 2, 1969	View looking toward the south of western Isle Derniere. The island is in background, Caillou Boca in foreground.
7	178	October 2, 1969	View northwest across western Isle Derniere. Inlet shown is Coupe Colin. Note new sand spit in forground.
8	183	October 2, 1969	View northwest toward Raccoon Point western Isle Derniere, showing position of new sand spit.
9	607	June 24, 1967	View north toward Coupe Colin opening in Isle Derniere with new sand spit in foreground.
10	964	June 24, 1967	View looking north of western Isle Derniere; new sand spit in foreground; Coupe Colin Inlet in background.
11	608	June 24, 1967	View east along Isle Derniere, Terrebonne Parish, showing new sand spit seaward and west of Coupe Colin beach.

12	180	October 2, 1969	View northeast across western Isle Derniere. Coupe Colin Inlet in right rear of photo. New sand spit in foreground.
13	182	October 2, 1969	View northeast across western Isle Derniere and new sand spit.
14	957	October 2, 1969	View looking southeast showing water boundary line and its relationship to the north shore of Caillou Bay.
15	954	October 2, 1969	View looking toward the northeast showing water boundary in Caillou Bay. Position can be determined from Bayou Goreau in central background.
16	972	October 2, 1969	View looking northeast of north shore of Caillou Bay. Shrimp drying platforms in center of photograph are located near the mouth of Bayou Goreau.
17	975	October 2, 1969	View looking west of north shore Caillou Bay. Shrimp drying platforms on the shore of Bayou Goreau in background.
18	958	October 2, 1969	View looking to the east. East Bay Junop in back-

			ground, Bayou Du West in middle background.
19	950	October 2, 1969	View looking northwest across Pelican Island along north shore of Caillou Bay. East Bay Junop in background, Pelican Pass in right foreground.
20	974	October 2, 1969	View looking north of north shore of Caillou Bay. Stream on left margin of photo is Taylor's Bayou. East Bay Junop in left rear background of photo.
21	187	October 2, 1969	View of north shore of Caillou Bay Terrebonne Parish. Bayou Charbon in right background.
22	186	October 2, 1969	View of north shore of Caillou Bay, Terrebonne Parish. Area west of outlet of Grand Bayou du Large.
23	185	October 2, 1969	View north showing opening of Grand Bayou du Large into Caillou Bay, Terrebonne Parish.
24	184	October 2, 1969	View looking northeast showing northeast shore line of Caillou Bay, Terrebonne Parish.
25	955	October 2, 1969	Another view of water boundary extending out-

			ward into Caillou Bay from north shore of Caillou Bay.
26	1000	October 2, 1969	Water boundary line extending into Caillou Bay from north shore.
27	952	October 2, 1969	Water boundary line extending into Caillou Bay from north shore.
28	969	October 2, 1969	Water boundary line in Caillou Bay extending almost perpendicular to north shore of Caillou Bay. Details of this boundary are shown on additional photos in this series.

PART II—BLACK AND WHITE PHOTOGRAPHS

Chronologic Number of Photograph	*Louisiana Preliminary Identifying Number*	*Date of Photography*	*Description of Photograph*
B & W 1	633	October 2, 1969	View toward the west along Isle Derniere with Raccoon Point in the distance. Coupe Colin Inlet in center of photograph and new sand spit on seaward (left) side of island.
B & W 2	640	October 2, 1969	View toward the south with Isle Derniere in the background. Foreground shows

			marsh land surrounding old Bayou MiSale. Caillou Boca separates Isle Derniere from marsh land.
B & W 3	642	October 2, 1969	View south showing the marsh land of old Bayou MiSale. Caillou Boca in foreground and Isle Derniere in background.
B & W 4	636	October 2, 1969	View toward the northwest showing the north shore of Caillou Bay and a foam line indicating a water interface in foreground.
B & W 5	637	October 2, 1969	View toward the east showing the north shore of Caillou Bay. Note the abundant shelly material comprising the beach along the border of the marsh land.
B & W 6	635	October 2, 1969	View toward the east showing the north shore of Caillou Bay with a foam line suggesting a water interface in foreground.
B & W 7	634	October 2, 1969	View toward the northeast showing and the north shore of Caillou Bay and a foam line indicating a water interface in Caillou Bay.
B & W 8	644	October 2, 1969	View toward the east, showing north shore of Caillou

			Bay. Note decrease in shell towards the east.
B & W 9	638	October 2, 1969	View east of the north shore of Caillou Bay, an area slightly farther to the east than shown on previous photograph (B & W 8) Note lesser amount of shell on beach.

Exhibit 190-A Photo area Index Sheets

Exhibit 191-A LPI 993 - U. S. Army Corps of Engineers Photo No. 902-25 dated October 3, 1929

Exhibit 191-B LPI 995 - U. S. Army Corps of Engineers Photo No. 902-550 dated October, 1929

Exhibit 191-C LPI 996 - U. S. Army Corps of Engineers Photo No. 902-551 dated October, 1929

Exhibit 191-D LPI 997 - U. S. Army Corps of Engineers Photo No. 902-552 dated October, 1929

Exhibit 191-E LPI 998 - U. S. Army Corps of Engineers Photo No. 902-553 dated October, 1929

Exhibit 191-F LPI 999 - U. S. Army Corps of Engineers Photo No. 902-554 dated October, 1929

Exhibit 192 Photograph Album No. 5 of Dr. James P. Morgan, as follows:

LIST OF PHOTOGRAPHS TO ACCOMPANY TESTIMONY OF JAMES P. MORGAN CONCERNING NATURAL ENTRANCE POINTS AT ATCHAFALAYA BAY.

(All of the accompanying photographs were taken on June 6, 1968 by James P. Morgan and previously submitted as part of Exhibit 68, Appendix G, Map Exhibits and Related Materials for Brief of the State of Louisiana in Support of its Motion for Entry of Supplemental Decree No. 2).

Chronologic Number of Photograph	*Photograph Number and Page*	*Description of Photograph*
1	No. 4, Page 1	Point au Fer with North Island lying to its left and with a pronounced oyster reef formation in the foreground. The oyster reef serves as the eastern natural entrance point of Atchafalaya Bay.
2	No. 5, Page 1	Closer view of the oyster reef formation off Point au Fer. North Island can be seen in the background.
3	No. 6, Page 1	Another view from a different angle of the oyster reef off Point au Fer that is the eastern natural entrance point of Atchafalaya Bay.
4	No. 7, Page 1	Looking west at Point au Fer and the reef structures beyond.

5	No. 8, Page 2	Close-up from the ground of the reef formation off Point au Fer that is the eastern natural entrance point of Atchafalaya Bay.
6	No. 10, Page 2	Additional ground photograph of reef formation off Point au Fer.
7	No. 9, Page 2	Another ground photograph of reef formation off Point au Fer. Point au Fer and intervening reef formations can be seen in the background.
8	No. 12, Page 2	Reef formation off Point au Fer with helicopter in the background to show size and extent of reef.
9	No. 13, Page 2	Same reef formation stretching out toward the Gulf of Mexico.
10	No. 15, Page 2	Same reef formation. Looking toward east with Point au Fer and intervening reef formations in the background.
11	No. 11, Page 3	Close-up of oysters and shells on eastern natural entrance point of Atchafalaya Bay. Note that some oysters are up-right or in active growth position. Camera lens case is in photograph to show size.
12	No. 14, Page 3	A part of the reef formation

		off Point au Fer showing oysters in active growth position.
13	No. 33, Page 3	Looking northward from just above the western natural entrance point of Atchafalaya Bay. Formations in foreground and winding to right background are islands permanently above high water.
14	No. 31, Page 3	Shell Keys formation, looking northeastward.
15	No. 32, Page 3	Shell Keys again, but looking more nearly due north.
16	No. 34, Page 3	Ground photograph on a Shell Keys island. High-tide line is large ridge in right foreground. Note extent of island to left and rear of photograph.
17	No. 28, Page 4	Some of the reef formations associated with the Shell Keys.
18	No. 25, Page 4	Looking south past Mound Point on Marsh Island toward numerous reef formations leading out to the Shell Keys.
19	No. 30, Page 4	Looking east at reef formations that form a natural barrier blocking entrance into Atchafalaya Bay in this vicinity. Marsh Island is on the left.
20	No. 29, Page 4	Looking west along the shoreline of Marsh Island showing

		reef formations extending toward the Shell Keys.
21	No. 26, Page 4	Looking south from Marsh Island down the reef formations and Shell Keys.
22	No. 24, Page 4	Looking south at the western headland Louisiana employs in Atchafalaya Bay. Because the Shell Keys are farther than twenty-four miles from the eastern natural entrance point, Louisiana moves the closing line in to this point. The line Louisiana describes is not quite twenty-four miles long because the shoreline of Marsh Island turns slightly northward just to the right of the point to which Louisiana closes.

Exhibit 192-A	Index Map to Volume 5
Exhibit 193-A	LPI 535 - U. S. Corps of Engineers Photograph dated February 29, 1956 - P-55, 24-114
Exhibit 193-B	LPI 538 - U. S. Corps of Engineers Photograph dated October 29, 1957 - X-2, 550
Exhibit 193-C	LPI 539 - U. S. Corps of Engineers Photograph dated October 29, 1957 - X-2, 551
Exhibit 193-AB	LPI 572 - U. S. Corps of Engineers Photograph dated November 15, 1969 - 59-111

Exhibit 193-AA	LPI 571 - U. S. Corps of Engineers Photograph dated November 15, 1969 - 59-109
Exhibit 193-Y	LPI 569 - U. S. Corps of Engineers Photograph dated November 15, 1969 - 59-107
Exhibit 193-X	LPI 568 - U. S. Corps of Engineers Photograph dated November 15, 1969 - 59-105
Exhibit 193-AN	LPI 584 - U. S. Corps of Engineers Photograph dated November 20, 1969 - 60-4
Exhibit 193-AM	LPI 583 - U. S. Corps of Engineers Photograph dated November 20, 1969 - 60-3
Exhibit 194 (Evidence)	LPI 1062 - This exhibit pertains to the Atchafalaya Bay complex. It shows natural entrance point and measurement information.
Exhibit 195	LPI 1163 - 24 pages of descriptive notes by Dr. James P. Morgan pertaining to various photographs
Exhibit 196	LPI 917 - Gerdes Map (two pages)
Exhibit 197	LPI 1056 - This display employs base maps, at a reduced scale from the Set of 54 maps, to reflect natural entrance points analyses and measurement data for various pronounced land forms in East Bay
Exhibit 198	This collection of illustrative display materials shows Louisiana closing

	line contentions, primary and alternative, for the Caillou Bay area. It also reflects measurement information
Exhibit 199	LPI 1211 - Relevant portions of a map prepared by G. Etzel Pearcy using U.S.C. & G.S. Chart No. 1275 as a base map, at a reduced scale with notes thereon showing color information not reflected by the originals. This map was obtained by Louisiana by the Department of State through the United States Department of Justice.
Exhibit 199-A	Same as Exhibit 199, showing colored lines
Exhibit 200	LPI 1213 - Same description as Louisiana Preliminary Identifying No. 1211, except the base map is U. S. C. & G. S. Chart No. 1272
Exhibit 200-A	Same as Exhibit 200, showing colored lines
Exhibit 201	Map 2 of 8 of the Set of 54 maps
Exhibit 202	LPI 1068 - U. S. C. & G. S. air photo compilation No. T 5295
Exhibit 203	LPI 1067 - U.S.C. & G.S. air photo compilation No. T5291
Exhibit 204	LPI 905 - U.S.C. & G.S. map H-6492
Exhibit 205	LPI 906 - U.S.C. & G.S. map H-6172
Exhibit 206	LPI 907 - U.S.C. & G.S. map No. 3630
Exhibit 207	LPI 908 - U.S.C. & G.S. map No. 2752

Exhibit 208	LPI 909 - U.S.C. & G.S. map No. 1762
Exhibit 209	LPI 910 - U.S.C. & G.S. map No. 1763
Exhibit 210	LPI 911 - U.S.C. & G.S. map No. 4038
Exhibit 211	LPI 912 - U.S.C. & G.S. map No. 4044
Exhibit 212	LPI 913 - U.S.C. & G.S. map No. 4050
Exhibit 213	LPI 914 - U.S.C. & G.S. map No. T-5403
Exhibit 214	LPI 915 - U.S.C. & G.S. map T-5407
Exhibit 215	LPI 916 - U.S.C. & G.S. map 1691
Exhibit 216	LPI 904 - U.S.C. & G.S. map H-6513
Exhibit 217 A-E	U. S. Army Corps of Engineers maps, in 5 sheets, entitled "Passes of the Mississippi River, La." from photos-aerial surveys made in 1922 and 1929
Exhibit 218 A-F	La. Ex. 1-6; Photographs by Mr. David Morgan of Isle Derniere
Exhibit 219	Overheads from Mr. David Morgan's presentation; figure 1
Exhibit 220	Figure 49; Shalowitz
Exhibit 221	Figure 50; Shalowitz
Exhibit 222	Monterey Bay - Depth of penetration methods and data

Exhibit 223	Monterey Bay - Depth of penetration methods - construction of median line for depth of penetration measurement in Monterey Bay
Exhibit 224	Figure 3 of Mr. David Morgan's depth of penetration memo
Exhibit 225	Figure 4 of Mr. David Morgan's depth of penetration memo
Exhibit 226	Figure 5 of Mr. David Morgan's depth of penetration memo
Exhibit 227	Mr. David Morgan's sketch of fjords
Exhibit 228	Monterey Bay - Method B
Exhibit 229	Mr. David Morgan's Bay Penetration data
Exhibit 230	LPI 1182, a study prepared by Mr. David J. Morgan entitled, "Measurement of Penetration Ratio"
Exhibit 231	Mr. David Morgan's Bucket Bend Bay work map
Exhibit 232	Mr. David Morgan's Caillou Bay work map
Exhibit 233	Mr. David Morgan's West Bay work map
Exhibit 234	Mr. David Morgan's East Bay work map
Exhibit 235	Mr. David Morgan's Norway fjord work map
Exhibit 236-A	Chart 1276, 12th edition
Exhibit 236-B	Chart 1277, 13th edition

Exhibit 237-A	Chart 1274, 10th edition
Exhibit 237-B	Chart 1272, 1970 edition
Exhibit 237-C	Chart 1273 of attachment, 5th edition
Exhibit 238	Talcott map, 1839
Exhibit 239	1918 chart 194
Exhibit 240	1901 chart 194
Exhibit 241	1873 chart 194
Exhibit 242	9th edition, chart 1272 with addenda
Exhibit 243	January 1933, chart 1272
Exhibit 244	April, 1944, chart 1272
Exhibit 245	October 1935, chart 1272
Exhibit 246	February, 1925, chart 1272
Exhibit 247	LPI 1231 - Gauld map sketch
Exhibit 248	Map 2 of 8
Exhibit 249-A	Mr. Philip L. Whitaker's field books **(1 of 2)**
Exhibit 249-B	Mr. Philip L. Whitaker's field books **(2 of 2)**
Exhibit 250-A	1198, prel. plat
Exhibit 250-B	1012, signed plat, showing mudlumps at South Pass
Exhibit 251	Geodimeter notes, 1198
Exhibit 252	1014-1023, copy of notes by Mr. Philip L. Whitaker on back of photos numbered 1014-1023
Exhibit 253	Tidal Bench Marks, South Pass

Exhibit 254	LPI 1013, Letter from Harland R. Cravat, Chief, Technical Planning and Operations Branch, Photogrammetry Division, U. S. Department of Commerce, Environmental Science Services Administration, Coast and Geodetic Survey, to Frederick W. Ellis dated August 20, 1970 file #C141
Exhibit 255	Methods of planimetering furnished Mr. Philip L. Whitaker by Mr. David Morgan
Exhibit 256-A	LPI 63 - Copy of portions of a 1911 map of the State of Louisiana issued for the Railroad Commission of Louisiana as a supplement to its twelfth annual report
Exhibit 256-B	LPI 64 - Copy of portions of a map entitled "New Commercial and Census Map of Louisiana" copyrighted in 1917
Exhibit 256-C	LPI 65 - Copy of portions of a map entitled "Post Route map of the State of Louisiana", filed in the map Division of the Library of Congress June 18, 1903
Exhibit 256-D	LPI 66 - Copy of a portion of a map of the State of Louisiana published by the Department of the Interior and compiled from the official records of the General Land Office and other sources under the direction of I. P. Berthong in 1916

Exhibit 257 Joint 1962 agreement

Exhibit 258 LPI 1165 - Map compiled under the direction of I. P. Berthong in 1916, from the official records of the General Land Office and other sources, showing the State of Louisiana, and being a published map from the records of the General Land Office of the Department of the Interior

Exhibit 259 LPI 342 - Message of President Jefferson, 9th Congress, 2nd Session, No. 25, pp. 68-69 (December 2, 1806)

Exhibit 260 LPI 343 - Message of President Jefferson, 8th Congress, 1st Session, No. 21 pp. 61-63 (October 17, 1803)

Exhibit 261 LPI 344 - Report of the Secretary of State, Thomas Jefferson, 2nd Congress, 1st Session, No. 59 (March 7, 1792)

Exhibit 262 LPI 346 - *Journals of the Continental Congress, 1774-1789*, edited from the original records in the Library of Congress by John C. Fitzpatrick, Vol. IIII, 1786, August 1 - December 31 U.S.G.P.O., Washington, 1934. Tuesday, August 29, 1786, pp. 574-596

Exhibit 263 LPI 347 - *The Debates and Proceedings of the Congress of the United States* with an appendix containing important state papers and public documents and all the laws of a public nature. 7th Congress, 2nd Session,

from December 6, 1802, to March 3, 1803, Vol. 12, Washington: Gale & Seaton, 1851. James Madison, Secretary of State to Robert R. Livingston, May 1, 1802, pp. 1027-1028

Exhibit 264 LPI 349 - *The Debates and Proceedings of the Congress of the United States* with an appendix containing important state papers and public documents and all the laws of a public nature. 7th Congress, 2nd Session, from December 6, 1802, to March 3, 1803, Vol. 12, Washington: Gale & Seaton, 1851. Mississippi Question, February 23, 1803, pp. 151-154

Exhibit 265 LPI 350 - *The Debates and Proceedings of the Congress of the United States* with an appendix containing important state papers and public documents and all the laws of a public nature. 7th Congress, 2nd Session, from December 6, 1802, to March 3, 1803, Vol. 12, Washington: Gale & Seaton, 1851. Mississippi Question, February 1803, pp 231-234

Exhibit 266 LPI 356 - Executive Documents & Reports Committees, 27th Congress, 1st Session. Doc. #9, Ho. of Rep., March 6, 1841, Resolution, of the State of La., for a steamship of war to be built on the waters of the Mississippi

Exhibit 267 LPI 357 - Executive Documents &

	Reports Committees, 27th Congress, 1st Session. Doc #10, Ho. of Rep., June 12, 1840, Resolution of the Legislature of La. asking that the fortifications at the mouths of the Mississippi be completed and mounted.
Exhibit 268	December, 1932 edition of chart 198
Exhibit 269	October, 1925 edition of chart 1272
Exhibit 270	1937 edition of map of Louisiana - Official Map of Louisiana, first edition
Exhibit 271	April, 1924 edition of chart 194
Exhibit 272	March 1916 edition, which is a reissue of June 1914 edition of chart 194
Exhibit 273	June, 1914 edition of chart 194
Exhibit 274	LPI 1169 - Hardee's Official Map of Louisiana dated 1895
Exhibit 275	October, 1911 edition of chart 194
Exhibit 276	Sketch of waves by F. W. Ellis
Exhibit 277	Chart No. 1272, 23rd Ed., May 1969
Exhibit 278	I.L.C. No. 8 lease, 1956
Exhibit 279	Outer Continental Shelf "Hearings Before A Special Sub-Committee," December 17, 1969, Janaury 22, March 4, pp. 202-208
Exhibit 280	Mr. Stevenson's Speech
Exhibit 281	Dr. Alexander Melamid's published articles from the *Professional Geo-*

grapher, with letter to Mr. Jonathan Charney

Exhibit 282 Dr. Alexander Melamid's published articles from the *Oil Forum*, with letter to Mr. Strauss

Exhibit 283 General Documentary Materials, as follows:

LOUISIANA EXHIBIT NO. 283

GENERAL DOCUMENTARY MATERIALS

INDEX

Tab No.	*L.P.I. No.*	*Description*
1	1232	A letter from Robert D. Hodgson to Mr. Jonathan Charney, dated February 2, 1971, with enclosures consisting of letter from Robert D. Hodgson to Commander P. B. Beazley, dated March 31, 1970, and a letter from Commander P. B. Beazley to Dr. Robert D. Hodgson dated May 27, 1970.
2	1233	Part III of *The Law of Territorial Waters* from the Harvard Studies of International Law, Reporter, George Grafton Wilson.
3	1234	A letter from Mr. D. A. McDougal of the office of the Legal Adviser of the Department of State to Mr. Hackworth, dated June 26, 1934, enclosing a memorandum dated June 25, 1934 pertaining to the extent of control that a state may exercise over its territorial waters.

4 1235 A letter from R. S. Patton, Director of the United States Coast and Geodetic Survey, to Samuel W. Boggs of the State Department dated March 3, 1930, enclosing suggestions regarding the three-mile limit or parts thereof pertaining to bays and islands, together with copy of a letter dated March 22, 1930, to Captain Patton from S. W. Boggs, dateline at the Hague, The Netherlands.

5 1237 A letter to Mr. Hackworth from S. W. Boggs dated April 6, 1931, on the letterhead of the Department of State of the office of the Historical Adviser with enclosures pertaining to sundry charts which were the subject of the letter and which were published for the United States Tariff Commission.

6 1238 A letter to Mr. Miller from the Acting Secretary of the Department of State dated February 27, 1930.

6-A 1238 Enclosure with a draft proposal for the League of Nations Hague Conference dated March 17, 1930, showing proposals presented by the Norwegian and Swedish delegations.

7 1299 Copy of memorandum from the Solicitor of the Department of the Interior to the Secretary of the Interior dated Otcober 1, 1954, from records of the Department of the Interior.

8 1300 A group of copies of documents from the records of the American delegation to the

Conference for the Codification of International Law held at the Hague in 1930 consisting of:

(a) A memorandum on the subject of territorial waters dated March 6, 1930 with annotations of the record copy to the effect that the memorandum was to be handed to the Secretary in London, but instead, Mr. Miller talked to the Secretary.

(b) Proposals presented by the Norwegian and Swedish Delegations to Committee II on Bases 3 and 4; 6, 7, and 8.

(c) Amendments proposed by the Delegation of the United States pertaining to Bases of discussion 1, 3, 4, 5, and 6.

(d) A memorandum by S. W. Boggs dated March 22, 1930, pertaining to an interview with a Captain Luymes.

(e) Proposals presented by the Norwegian and Swedish Delegations upon bases of discussions 3 and 4, 6, 7, and 8. (Note, this is apparently the same item described under (b) above except for annotations or marginalia appearing on (b).)

9 1301 A group of documents from records of the Department of State in the National Archives described as follows:

Copies of a group of documents from:

(a) A memorandum from the Legal Adviser of the Department of State to Mr. S. W. Boggs dated March 6, 1935 with the im-

print of the Office to the Geographer of the Department of State.

(b) A memorandum on stationery of the Department of State from "SWB," presumably, S. W. Boggs, to a Mr. Vallance, dated March 7, 1935.

(c) A memorandum dated March 11, 1935 initialed, "W.R.V." from the office of the Legal Adviser of the Department of State stamped with the receipt stamp of the office of the Geographer of the Department of State addressed to Mr. Boggs.

(d) A memorandum from the office of the Historical Adviser of the Department of State dated March 14, 1935 to Mr. Vallance with annotation or marginalia initialed "S.W.B."

(e) A draft with marginalia on the original of a letter to the Secretary of the Interior from the Secretary of State showing initials of "S.W.B." and others.

(f) Another draft of a letter proposed to be sent to the Secretary of the Interior by the Secretary of State bearing initials of "S.W.B." and other persons pertaining to a response to a letter of February 27, 1936. Similar in content to the next preceding letter except that the hand-written additions or annotations thereon (from the originals) differ, this copy having crossed out five lines on the first page, and the preceding draft (item (f) above) having proposed

certain additional language now apparently incorporated in this typed draft.)

(g) A copy of the letter dated March 22, 1935 which was forwarded to the Secretary of the Interior by the Assistant Secretary of State for the Secretary of State in response to The Secretary of the Interior's letter of February 27, 1935.

10 1302 A copy of the *North Atlantic Coast Fisheries Case* betv een Great Britain and the United States with related documents as reported in the *Hague Court Reports* on pages 142 through 225, inclusive. Handwritten marginalia on the first sheet of the copy are not from the original but are merely file number designations.

11 1303 Copy of the *Fisheries Case (United Kingdom v. Norway)* from the records of the International Court of Justice for the year 1951. (Note: the marginalia are from the hand of an unknown past reader of the report and are not submitted.)

13 1477 Bulletin Number Four, Coastal Studies Institute of Louisiana State University. See Technical Report 76: "Effects of Hurricane Camille on the Landscape of the Breton-Chandeleur Island Chain"

14 1482 Executive Order issued by Theodore Roosevelt concerning the declaration of bird preserves for certain islands including Breton Island, dated November 11, 1905.

15 1483 Executive Order issued by Theodore Roosevelt concerning the decalaration of bird pre-

serves for certain islands including Breton Island, dated October 4, 1904.

16 1516 A copy of the transcript of the hearing before the Committee on Foreign Relations, United States Senate, Eighty-Sixth Congress, Second Session concerning *Conventions of the Law of the Sea.*

17 1520 Decision, *Post Office vs. Estuary Radio, Ltd.* Opinion, *Regina vs. Kent Justices.*

18 1549 a & b (a) Letter from President John Quincy Adams to the House of Representatives of the United States dated Washington, 15th January, 1828.

(b) Letter from Henry Clay, Secretary of State, dated January 14, 1828, referred to by President Adams.

19 1008 Copy of letter from Gulf Oil Corporation Law Department (Melvin Evans) dated June 24, 1968, with documents referred to therein.

20 Documents relating to Louisiana's Motion of April, 1970 for publication of documents, together with Responses by the United States.

21 1538 This is a group of documents pertaining to methods of delimitation under the proposal at the Hague Conference in 1930 and other documents pertaining to Tariff Commission Studies all attached to a certification by one Jane F. Smith dated March 2, 1971

Exhibit 284	Deposition of Mr. Christopher Dobard.
Exhibit 284-A	Exhibits to Deposition of Mr. Christopher Dobard.
Exhibit 285	LPI 1526, an exhibit showing straight baselines designated by the United States, its agencies or responsible officials, around parts of the Mississippi Delta area.
Exhibit 286	LPI 1525, an exhibit pertaining to the Caillou Bay region showing straight baselines designated by the United States, its agencies or responsible officials.
Exhibit 287-A-H	1:250,000 AMS Q 501 series maps of Bristol Bay area:
A	4-1 (Goodnews)
B	4-3 (Dillingham)
C	4-4 (Hagemeister Island)
D	4-5 (Nushagak)
E	4-6 (Naknek)
F	4-8 (Bristol Bay)
G	4-9 (Ugashik)
H	4-11 (Chignik)
Exhibit 288	LPI 1274, map labeled Bristol Bay, reference number 3, 4 series 1301, edition 1-AMS, scale 1:1,000,000.
Exhibit 289	LPI 1273, overlay of Delta por-

	tion of map labeled Mobile, reference number NH 16, series 1301, edition 1-AMS, scale 1:1,000,000.
Exhibit 290	Johnston's Readyfold Coloured Touring Map.
Exhibit 290-A	Film overlay of portion of this map.
Exhibit 291	Sheet 12, map of England S.E. and London - Thames Estuary.
Exhibit 292	Map - East Anglia.
Exhibit 293	Larimore's work map, chart 1272, August 15, 1970 ed., showing planimetry areas within the Mississippi River, South Pass and Southwest Pass. Also markings by James P. Morgan.
Exhibit 294	LPI 1273, map labeled Mobile, reference number NH 16, series 1301, ed. 1-AMS scale 1:1,000,000.
Exhibit 295	LPI 1283, portion of delta area of map labeled Breton Sound, sheet numbered NH 16-7, 1:250,000.
Exhibit 295-A	Overlay of above map, exhibit 295.
Exhibit 296	East Bay planimetry information on 24th edition (December 6, 1969) and 25th edition (August 15, 1970) U. S. C. & G. S. nautical chart No. 1272.
Exhibit 297	LPI 1521, an exhibit showing application of the Boggs Reduced Area formula to Monterey Bay and Atchafalaya Bay showing that the

formula was never recognized by law since these bays were adjudicated to be bays acquired by the states in the 19th century.

Exhibit 298 LPI 1298, Enlargement of "Figure 6.—Semicircular rule applied to San Diego Bay, using reduced area method." from 1 *Shalowitz* 39 (1962).

Exhibit 299 LPI 1517, East Bay Shoreline, January 24, 1970 from Coast and Geodetic Survey Color Photography Curtis Buttorff interpretation.

Exhibit 300 LPI 1524, an exhibit showing interpretation of 1954 aerial photography by Mr. Curtis Buttorff, former United States closing lines and modified water gap information, all pertaining to additional low water line information in the vicinity of Isle Derniere.

Exhibit 301 Overlay of the South Pass sheet. (Map 4 of 8 coverage at scale of 1:20,000 and on which Buttorff interpreted East Bay shore line.)

Exhibit 302 LPI 1271, photograph, Ammann identifying No. 727-124, dated 1/7/54.

Exhibit 303 LPI 1270, photograph, Ammann identifying No. 727-123, dated 1/7/54.

Exhibit 304 LPI 1269, photograph, Ammann

identifying No. 727-122, dated 1/7/54.

Exhibit 305 LPI 1268, photograph, Ammann identifying No. 727-121, dated 1/7/54.

Exhibit 306 LPI 1267, photograph, Ammann identifying No. 727-120, dated 1/7/54.

Exhibit 307 LPI 1266, photograph Ammann identifying No. 727-119, dated 1/7/54.

Exhibit 308 LPI 1265, photograph, Ammann identifying No. 727-118, dated 1/7/54.

Exhibit 309 LPI 1264, photograph, Ammann identifying No. 727-38, dated 1/7/54.

Exhibit 310 LPI 1263, photograph, Ammann identifying No. 726-96, dated 1/8/54.

Exhibit 311 LPI 1293, photograph, Ammann identifying No. 727-197, dated 1/8/54.

Exhibit 312 LPI 1292, photograph, Ammann identifying No. 727-177, dated 1/8/54.

Exhibit 313 LPI 1291, photograph, Ammann identifying No. 727-176, dated 1/8/54.

Exhibit 314 LPI 1290, photograph, Ammann

identifying No. 727-175, dated 1/8/54.

Exhibit 315 LPI 1289, photograph, Ammann identifying No. 727-144, dated 1/7/54.

Exhibit 316 LPI 1288, photograph, Ammann identifying No. 727-135, dated 1/7/54.

Exhibit 317 LPI 1287, photograph, Ammann identifying No. 727-134, dated 1/7/54.

Exhibit 318 LPI 1286, photograph, Ammann identifying No. 727-133, dated 1/7/54.

Exhibit 319 LPI 1285, photograph, Ammann identifying No. 727-126, dated 1/7/54.

Exhibit 320 LPI 1284, photograph, Ammann identifying No. 727-125, dated 1/7/54.

Exhibit 321 LPI 1304, photo mosaic obtained from Ammann International Corp. compiled from photos of Jack Ammann Photogrammetric Engineers, Inc. based upon 1954 aerial photography employed in preparation of the Set of 54 maps, sheet L 39.

Exhibit 322 LPI 1305, photo mosaic obtained from Ammann International Corp, compiled from photos of Jack Ammann Photogrammetric Engineers, Inc., based upon 1954 aerial photo-

graph employed in preparation of the Set of 54 maps, sheet L 40.

Exhibit 323 Natural Entrance point alternative at South Pass at various tide stages. Location 1, overlay, made by Curtis Buttorff at National Ocean Survey.

Exhibit 324 George H. Lauff, ed., *Estuaries*, American Association for the Advancement of Science, No. 83 (1967).

Exhibit 325 LPI 1478, map of Yarmouth-Windsor area of Nova Scotia, published by Canadian government showing bay of Fundy and St. Mary's Bay area; LPI 1479, map labeled Church Point, N. S., 21 B/8 West half, first edition;

LPI 1480, map labeled Church Point, N. S., 21 B/8 East Half, first edition;
LPI 1481, map labeled Digby, N. S., 21 A/12 West Half, second edition, all dealing with St. Mary's Bay.

Exhibit 326 1886 Chart of Breton Island Sound

Exhibit 327-A Map 20 of 41, Buttorff work sheet of Isle Derniere, analyzing Ammann photos.

Exhibit 327-B Map 19 of 41, Buttorff work sheet of Isle Derniere, analyzing Ammann photos.

Exhibit 328 LPI 1463, David Morgan's index to photos taken along South Pass and showing artificial maintenance of openings by Corps of Engineers (sheet 4 of 8).

Exhibit 329 Photograph Album Vol. 3 of Dr. James P. Morgan, concerning artificial maintenance of openings between South Pass and East Bay (for rebuttal).

LIST OF PHOTOGRAPHS TO ACCOMPANY REBUTTAL TESTIMONY OF JAMES P. MORGAN CONCERNING ARTIFICIAL MAINTENANCE OF OPENINGS BETWEEN SOUTH PASS, MISSISSIPPI RIVER, AND EAST BAY

(The following photographs illustrate artificially maintained openings from South Pass of the Mississippi River into East Bay. The photographs depict openings on the west bank of South Pass consecutively from south to north. Figure 1, pages 1 through 5 (LPI #1463) accompanying the photographs, indicates the position of each photographed opening. All photographs were taken by David J. Morgan unless otherwise indicated.)

Chronologic Number of Photograph	*Louisiana Preliminary Identifying Number*	*Date of Photography*	*Description of Photographs*
1	1420	February 23, 1971	View west of opening shown on Fig. 1, page 1.

2	1414	February 23, 1971	View west of opening shown on Fig. 1, page 1.
3	1406	February 23, 1971	View west of opening shown on Fig. 1, page 1.
4	1405	February 23, 1971	View west of opening shown on Fig. 1, page 1.
5	1425	February 23, 1971	View west of U.S. Coast Guard Light Station. (Fig. 1, pages 1 and 2)
6	1418	February 23, 1971	View west of opening shown on Fig. 1, page 2.
7	1417	February 23, 1971	View west of opening shown on Fig. 1, page 2.
8	1416	February 23, 1971	View west of opening shown on Fig. 1, page 2.
9	1396	February 23, 1971	View west of opening shown on Fig. 1, page 2.
10	1415	February 23, 1971	View west of opening shown on Fig. 1, page 2.
11	1397	February 23, 1971	View west of opening shown on Fig. 1, pages 2 and 3.
12	1365	February 23, 1971	View west of opening shown on Fig. 1, pages 2 and 3.
13	1419	February 23, 1971	View west of opening shown on Fig. 1, pages 2 and 3.
14	1404	February 23, 1971	View west of opening shown on Fig. 1, pages 2 and 3.
15	1362	February 23, 1971	View west of opening shown on Fig. 1, pages 2 and 3.

			Photograph by James P. Morgan
16	1361	February 23, 1971	View west of opening shown on Fig. 1, pages 2 and 3. Photograph by James P. Morgan
17	1351	February 23, 1971	View west of opening shown on Fig. 1, pages 2 and 3.
18	1350	February 23, 1971	View west of Oysterville Light and opening to west shown on Fig. 1, page 3. Photograph by James P. Morgan
19	1375	February 23, 1971	View west of opening immediately north of Oysterville Light shown on Fig. 1 page 3.
20	1360	February 23, 1971	View west of opening shown on Fig. 1, page 3.
21	1376	February 23, 1971	View west of opening shown on Fig. 1, page 3.
22	1359	February 23, 1971	View west of opening shown on Fig. 1, page 3. Photograph by James P. Morgan
23	1366	February 23, 1971	View northwest of opening shown on Fig. 1, pages 3 and 4. Photograph by James P. Morgan
24	1403	February 23, 1971	View northwest of opening shown on Fig. 1, pages 3 and 4.

25	1422	February 23, 1971	View west of opening shown on Fig. 1, pages 4 and 5.
26	1421	February 23, 1971	View northwest of opening shown on Fig. 1, pages 4 and 5.
27	1423	February 23, 1971	Detail of rip-rap at opening shown on Fig. 1, pages 4 and 5.
28	1373	February 23, 1971	View west of rip-rap controlled opening shown on Fig. 1, pages 4 and 5.
29	1372	February 23, 1971	View west of rip-rap controlled opening shown on Fig. 1, pages 4 and 5.
30	1371	February 23, 1971	View west of rip-rap controlled opening shown on Fig. 1, pages 4 and 5.
31	1401	February 23, 1971	View west of rip-rap blocking opening shown on Fig. 1, page 5.
32	1402	February 23, 1971	View west of rip-rap controlled opening shown on Fig. 1, page 5.

Exhibit 330 Photograph album of Mr. David J. Morgan of Isle Derniere area.

DESCRIPTION OF PHOTOGRAPHS AND RELATED LOCATION MAPS CONCERNING THE ISLE DERNIERE AREA

(All photographs taken by David J. Morgan unless otherwise annotated)

Chronologic Number of Illustration	*Louisiana Preliminary Identifying Number*	*Date of Photograph or Publication*	*Description of Photograph or Illustration*
1			Index map of Isle Derniere area showing location of Figures 1-5.
2			Figure 1 - portion of Cocodrie Quadrangle, 7.5 minute series showing approximate locations of photographs taken in that vicinity.
3	1256	September 5, 1970	View NNW of marsh vegetation in vicinity of Pass La Poule in Lake Pelto.
4	1261	September 5, 1970	View NE of marsh vegetation in vicinity of Pass La Poule in Lake Pelto.
5	1532		Figure 2 - Portion of sheet 18 of 41 of the Set of 54 Maps showing approximate locations of photographs taken in that vicinity.
6	1239	September 5, 1970	Wave action in Lake Pelto - view northward.

7	1245	September 5, 1970	Wave action in Lake Pelto - view northward.
8	1242	September 5, 1970	Remnant of Bobwin Point, former distributary in Lake Pelto. View N.
9	1262	September 5, 1970	View southward down west side of pinnacle of land extending northward to the west of Old Camp Pass.
10	1243	September 5, 1970	Pinnacle of land extending northward west of Old Camp Pass, looking NE.
11	1260	September 5, 1970	Detail of organic clay composing land in rear of island; exhumed vegetation in background.
12	1259	September 5, 1970	View facing south down pinnacle of land at rear of island to the west of Old Camp Pass.
13	1232		Figure 3 - portion of sheet 19 of 41 of the Set of 54 Maps showing the approximate position of photographs taken in that vicinity.
14	1252	September 5, 1970	View looking south at vegetation characteristics at rear of island.
15	1248	September 5, 1970	View looking south at boat traffic in Caillou Bay. Isle Derniere in background.

16	1544	March 13, 1971	View looking west at peninsula in Bay Round vicinity, north of Isle Derniere. (James P. Morgan)
17	1545	March 13, 1971	Vegetation characteristics on peninsula in Bay Round vicinity. (James P. Morgan)
18	1546	March 13, 1971	Vegetation characteristics on peninsula in Bay Round vicinity. (James P. Morgan)
19	1547	March 13, 1971	Vegetation characteristics on peninsula in Bay Round vicinity. (James P. Morgan)
20	1532		Figure 4 - portion of sheet 19 of 41 of the Set of 54 Maps showing the approximate positions of photographs taken in that vicinity.
21	1244	September 5, 1970	View of north shore of Caillou Bay showing vegetation characteristics. View eastward.
22	1532		Figure 5 - portion of sheet 20 of 41 of the Set of 54 Maps showing the approximate position of photographs taken in that vicinity.
23	1251	September 5, 1970	View looking north at exhumed island vegetation mud flat to the west of Coupe Colin.

24	1249	September 5, 1970	View NE across Coupe Colin at fishing camp on second island.
25	1253	September 5, 1970	View NE across Coupe Colin at fishing camp on second island.
26	1247	September 5, 1970	View loking ESE at back of westernmost island of Isle Derniere.
27	1250	September 5, 1970	View southward of westernmost island of Isle Derniere showing mangrove and other vegetation. (With D. J. Morgan)
28	1246	September 5, 1970	View southward of westernmost island of Isle Derniere showing mangrove and other vegetation. (With F. W. Ellis)
29	1255	September 5, 1970	View SW down rear of westernment island of Isle Derniere.
30	1258	September 5, 1970	Bateau on beach at rear of westernmost island approaching Raccoon Point. Exhumed marsh in foreground. View looking east.
31	1240	September 5, 1970	View looking east down westernmost island showing general characteristics of the island. Gulf of Mexico is to the extreme right.

32	1254	September 5, 1970	View looking northward showing vegetation characteristics-Caillou Bay in background.
33	1255	September 5, 1970	View looking west down westernmost island showing vegetation and general characteristics. Caillou Bay to right and Gulf to left.
34	1241	September 5, 1970	View looking west down beach of westernmost island of Isle Derniere. Gulf of Mexico to left.

Exhibit 331 A through E LPI 1548, hand-written summary report of David Morgan concerning comparison of the shapes and areas of water gap and island configurations in the Isle Derniere area plus annexed Xerox copies of map information.

Exhibit 332 A and B LPI 1484, record of the United States Coast and Geodetic Survey of the Department of Commerce showing hourly heights of tides at Eugene Island, Louisiana, dated February 5, 1954 for the period January 1 through January 14, referenced to a datum of 1.6 feet below mean low water.

Exhibit 333-A LPI 1294, statement by E. T. Oliver, Jr., dated February 18, 1971, concerning the records of Ammann In-

	ternational Corporation and predecessor firms being in his custody.
Exhibit 333-B	LPI 1295, film record card of Jack Ammann Photogrammetric Engineers, numbered 726, referred to in LPI No. 1294.
Exhibit 333-C	LPI 1296, film record card of Jack Ammann Photogrammetric Engineers, numbered 727, referred to in LPI No. 1294.
Exhibit 333-D	LPI 1297, statement from E. T. Oliver, Jr. of information obtained from original file record cards, statement dated February 18, 1971, and originally attached to LPI No. 1294.
Exhibit 334	LPI 1485, a document entitled, "Summary of Tide Information pertaining to 1954 Ammann Photography in the Isle Derniere Area."
Exhibit 334-A	Drawing by David Morgan regarding tide information derived from the Eugene Island gauge.
Exhibit 335	LPI 1518, a sketch prepared to graphically reflect wind direction information presented in testimony of Mr. Arthur I. Cooperman.
Exhibit 336	Mylar overlay of 24th edition of chart 1272, December 1969, delimiting areas for planimetry.
Exhibit 337	Mylar overlay of 25th edition of chart 1272, August, 1970, delimiting areas for planimetry.

Exhibit 338 Sketch by David Morgan illustrating scale problems on maps.

Exhibit 339 Work sheets showing data for 45-degree test in the Caillou Bay area (in comparison with United States Exhibit 355).

Exhibit 340 Photograph Album Vol. 1 of Dr. James P. Morgan, concerning mudlumps, South Pass sand spit, and Bucket Bend Bay area.

LIST OF PHOTOGRAPHS TO ACCOMPANY THE REBUTTAL TESTIMONY OF JAMES P. MORGAN CONCERNING PHYSICAL CHARACTERISTICS OF MISSISSIPPI DELTA MUDLUMPS, SOUTH PASS SAND SPIT AND BUCKET BEND BAY AREA

(All of the Photographs included here were taken by James P. Morgan unless otherwise indicated.)

PART I—COLOR PHOTOGRAPHS

Chronologic Number of Photograph	*Louisiana Preliminary Identifying Number*	*Date of Photography*	*Description of Photographs*
1	1434	February 21, 1971	River silt and "mainland" vegetation on mudlump at Southeast Pass. View northwest.
2	1452	February 21, 1971	Buck brush and isolated clumps of Roseau on South-

			east Pass mudlump. View north.
3	1429	February 21, 1971	Vegetation including Roseau on west (bayside) of Southeast Pass mudlump. View north.
4	1450	February 21, 1971	Rangia clams (indicative of marshland lakes) on Southeast Pass mudlump.
5	1445	February 21, 1971	Feces of coypu (nutria) in Bermuda grass on Southeast Pass mudlump.
6	1345	February 21, 1971	Very shallow water between Southeast Pass mudlumps indicated by significant waves generated over short fetch between islands. View north.
7	1369	February 22, 1971	Flock of terns disturbed on Pass a Loutre mudlumps. View north.
8	1367	February 22, 1971	Mudlumps off mouth of Pass a Loutre. View west.
9	1379	February 22, 1971	Mudlump islands off mouth of South Pass. View northeast. Photo by David J. Morgan.
10	1380	February 22, 1971	Mudlump islands off mouth of South Pass. View northeast. Photo by David J. Morgan.

11	1378	February 22, 1971	Mudlump islands off mouth of South Pass. View north Photo by David J. Morgan.
12	1377	February 22, 1971	Dr. Morgan collecting fossils from South Pass mudlump 89-90; being watched by Mr. Ellis. Photo by David J. Morgan.
13	1431	February 22, 1971	Fire ant mount on South Pass mudlump 89-90. Photo by David J. Morgan.
14	1441	February 23, 1971	Feces of coypu (nutria) on mud-cracked surface of South Pass mudlump 93.
15	1432	February 23, 1971	Feces of coypu (nutria) around mud puddle on mudlump 89-90. Photo taken by David J. Morgan.
16	1476	February 23, 1971	Telephoto view of South Pass Coast Guard Station and sand spit. View northeast. (No. 1 of a 7-photo panorama.)
17	1473	February 23, 1971	Telephoto view of South Pass Coast Guard Station and sand spit. View north. (No. 2 of a 7-photo panorama.)
18	1470	February 23, 1971	Telephoto view of South Pass Coast Guard Station and sand spit. View north. (No. 3 of a 7-photo panorama.)

19	1474	February 23, 1971	Telephoto view of South Pass Coast Guard Station and sand spit. View north. (No. 4 of a 7-photo panorama.)
20	1471	February 23, 1971	Telephoto view of South Pass Coast Guard Station and sand spit. View north. (No. 5 of a 7-photo panorama.)
21	1472	February 23, 1971	Telephoto view of South Pass Coast Guard Station and sand spit. View northwest (No. 6 of a 7-photo panorama.)
22	1475	February 23, 1971	Telephoto view of South Pass Coast Guard Station and sand spit. View northwest. (No. 7 of 7-photo panorama.)
23	1512	March 6, 1971	Mouth of South Pass showing sand spit which has reformed since Hurricane Camille and mudlumps in distance. View southwest.
24	1510	March 6, 1971	Mouth of South Pass showing sand spit which has reformed since Hurricane Camille. Mudlumps in distance. View north.
25	1509	March 6, 1971	Mouth of South Pass showing sand spit which has reformed since Hurricane Ca-

			mille. Mudlumps in distance. View east.
26	1437	February 23, 1971	Vegetation surrounding pond on South Pass mudlump 93. View southwest.
27	1382	February 23, 1971	Mud vent discharging brine into pond on South Pass mudlump 93. View southeast.
28	1438	February 23, 1971	Vegetation surrounding pond on South Pass mudlump 93. View northwest.
29	1496	March 6, 1971	View west toward the interior of Cubits Crevasse area north of Bucket Bend Bay.
30	1495	March 6, 1971	View west toward the interior of Cubits Crevasse area north of Bucket Bend Bay. Area immediately south of Photo No. 29.
31	1497	March 6, 1971	View toward southwest of Bucket Bend Bay.
32	1493	March 6, 1971	View toward southwest of Bucket Bend Bay.
33	1491	March 6, 1971	View toward southwest of Bucket Bend Bay. Pass a Loutre in the background.
34	1499	March 6, 1971	View west of Bull Bay (inner part of Bucket Bend Bay) and Paddy Bay. Pass a Loutre to left of photo.

35	1487	March 6, 1971	View north of Paddy Bay at upper end of Bucket Bend Bay. Pass a Loutre in left foreground.
36	1486	March 6, 1971	View to the northeast of Bucket Bend Bay and opening into Gulf.
37	1515	March 6, 1971	Marsh area south of Bucket Bend Bay. Mud flats reflect tide stage.
38	1514	March 6, 1971	Marsh area south of Bucket Bend Bay. Mud flats reflect tide stage.

PART II—BLACK AND WHITE PHOTOGRAPHS

Chronologic Number of Photograph	*Louisiana Preliminary Identifying Number*	*Date of Photography*	*Description of Photographs*
B & W 1	1307	March 6, 1971	Aerial view to northeast of Paddy Bay (foreground), Bull Bay (middle ground), and Gulf in Bucket Bend Bay area.
B & W 2	1465	March 6, 1971	Aerial view to the southwest showing Bucket Bend Bay area with Pass a Loutre in distance.
B & W 3	1468	March 6, 1971	Aerial view to the southwest showing Bucket Bend Bay area with Pass a Loutre in distance.

B & W 4	1469	March 6, 1971	View to the southwest showing ship entering South Pass with sand spit and mudlump islands in distance.

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Exhibit 341 Photograph album, Vol. 2 by Dr. James P. Morgan, concerning Joseph Bayou area.

LIST OF PHOTOGRAPHS TO ACCOMPANY THE REBUTTAL TESTIMONY OF JAMES P. MORGAN CONCERNING THE PHYSICAL CHARACTERISTICS OF THE JOSEPH BAYOU AREA, EAST BAY MISSISSIPPI DELTA

(All of the photographs included here were taken by James P. Morgan unless otherwise indicated.)

PART 1 - COLOR PHOTOGRAPHS

Figure 1 - Index Map showing photograph directions and locations by LPI Number.

Chronologic Number of Photograph	*Louisiana Preliminary Identifying Number*	*Date of Photography*	*Description of Photographs*
1	1357	February 22, 1971	View north from Joseph Bayou showing levees in foreground and dredged spoil in distance.
2	1346	February 22, 1971	View northeast from Joseph Bayou showing levees in

			foreground and dredged spoil in distnace.
3	1347	February 22, 1971	View east from Joseph Bayou across levee.
4	1355	February 22, 1971	View east across Joseph Bayou levee.
5	1356	February 22, 1971	View southeast down Joseph Bayou and left bank natural levee.
6	1353	February 22, 1971	View northeast across Joseph Bayou natural levee (middle ground) showing Roseau clumps in distance.
7	1354	February 22, 1971	View north from canal in Joseph Bayou area. See attached map (Fig. 1) for location.
8	1408	February 22, 1971	Well location in Joseph Bayou canal. See Fig. 1 for location.
9	1407	February 22, 1971	Well location in Joseph Bayou canal. See Fig. 1 for location.
10	1411	February 22, 1971	View northwest from Joseph Bayou canal showing crew boat in another canal in distance. See Fig. 1 for location.
11	1410	February 22, 1971	Deteriorating marshland in Joseph Bayou area. View

			north. See Fig. 1 for location.
12	1409	February 22, 1971	View northwest across deteriorating marshland in Joseph Bayou area. See Figure 1 for location.
13	1400	February 22, 1971	View southeast out mouth of Joseph Bayou into East Bay. See Fig. 1 for location.
14	1413	February 22, 1971	View northwest of Roseau marshland of Joseph Bayou area. See Fig. 1 for location.
15	1394	February 22, 1971	View north of Roseau marshland near mouth of Joseph Bayou. See Fig. 1 for location.
16	1398	February 22, 1971	View north of Roseau marshland near mouth of Joseph Bayou. See Fig. 1 for location.
17	1457	February 22, 1971	Mr. Ellis standing in Roseau clump at mouth of Joseph Bayou. See Fig. 1 for location. Photo by David J. Morgan.
18	1459	February 22, 1971	Mr. Ellis standing in Roseau clump at mouth of Joseph Bayou. See Fig. 1 for location. Photo by David J. Morgan.
19	1458	February 22, 1971	Mr. Ellis standing in Roseau clump at mouth of Joseph

			Bayou. See Fig. 1 for location. Photo by David J. Morgan.
20	1456	February 22, 1971	Mr. Ellis showing result of standing in Roseau clump at mouth of Joseph Bayou. Photo by David J. Morgan.
21	1381	February 22, 1971	Mr. Ellis showing result of standing in Roseau clump at mouth of Joseph Bayou. Photo by David J. Morgan.
22	1539	March 6, 1971	Aerial view toward southwest of the Joseph Bayou area. Southwest Pass in background.
23	1540	March 6, 1971	Aerial view toward southwest of the Joseph Bayou area. Southwest Pass in background.
24	1541	March 6, 1971	Aerial view toward southwest of the Joseph Bayou area. Southwest Pass in background.
25	1542	March 6, 1971	Aerial view toward southwest of the Joseph Bayou area. Southwest Pass in background.
26	1543	March 6, 1971	Aerial view toward southwest of the Joseph Bayou area. Southwest Pass in background.

PART II - BLACK AND WHITE PHOTOGRAPHS

Chronologic Number of Photograph	*Louisiana Preliminary Identifying Number*	*Date of Photography*	*Description of Photograph*
B & W 1	1326	February 22, 1971	Part of a 3-photo panorama (LPI #1523A) showing Joseph Bayou area; same region as shown on Fig. 1.
B & W 2	1327	February 22, 1971	Part of a 3-photo panorama (LPI #1523A) showing Joseph Bayou area; same region as shown on Fig. 1.
B & W 3	1328	February 22, 1971	Part of a 3-photo panorama (LPI #1523A) showing Joseph Bayou area; same region as shown on Fig. 1.
B & W 4	1329	February 22, 1971	Detail of Roseau marshland at the mouth of Joseph Bayou. View east (same location as LPI #1381, Fig. 1)
B & W 5	1340	February 22, 1971	Mr. Ellis standing in Roseau at the mouth of Joseph Bayou. View east (same location as LPI #1381, Fig. 1).

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Exhibit 342 LPI 1523-B, panorama of Dr. Morgan's photos of tombolo at South Pass.

Exhibit 343 LPI 1523-A, black and white panorama of Joseph Bayou area.

Exhibit 344 LPI 1522, an exhibit reflecting hydrographic information pertaining to the Pass a Loutre area. (colored)

Exhibit 345 Mylar film of map 2 of 8, North Pass, Pass a Loutre, to overlay exhibit 344.

Exhibit 346 Mylar film of map of Southeast Pass mudlumps, map 3 of 8, at reduced scale (approximately 1:30,000) to overlay Louisiana Exhibit 216.

Exhibit 347 Mylar film of mouth of South Pass from map 4 of 8 at reduced scale (approximately 1:30,000) to overlay Louisiana Exhibit 216.

Exhibit 348 Memo of area in acres of Mississippi River below Venice by Larimore.

Exhibit 349 *Water Borne Commerce of the United States*, Corps of Engineers, pp. 179-80 (1967)

Exhibit 350 *Water Borne Commerce of the United States*, Corps of Engineers, pp. 181-82 (1968)

Exhibit 351 *Water Borne Commerce of the United States*, Corps of Engineers, pp. 189-90 (1969)

Exhibit 352 Brief Exhibit 70-118, appendix G. of Louisiana Brief before the Supreme

Court. Harbor works to show channel depths (Corps of Engineers).

Exhibit 353 Three-mile projection plotted on reduced scale Set of 54 Maps (w/documents from Louisiana Answers to Second Interrogatories affixed to front cover).

Exhibit 353-A Computer printout of three-mile projection (done by Louisiana State University) (w/one-page attachments).

Exhibit 354 B-G Norwegian maps

Exhibit 355 The *In Camera* documents; Confidential documents; no copy allowed.

Exhibit 356 (a) Letter from Solicitor General Perlman to Boliver E. Kemp, Jr., Attorney General for the State of Louisiana, dated March 16, 1951. This letter has been introduced in evidence as U. S. Exhibit No. 341.

(b) The copies of the United States Coast and Geodetic Survey Charts Nos. 1115 and 116 upon which was delineated the line showing the general location of the landward boundary of the offshore area claimed by the United States, which were attached to the letter by Mr. Philip B. Perlman, Solicitor General, to the Honorable Boliver E. Kemp, Jr., dated March 16, 1951.

(c) Letter from Solicitor General Perlman to Boliver E. Kemp, Jr., At-

torney General of the State of Louisiana, dated June 12, 1951

(d) Letter from Solicitor General Perlman to Boliver E. Kemp, Jr., Attorney General of the State of Louisiana, dated June 26, 1951.

(e) Letter from Secretary of State Seward to Gabriel Tassara, Spanish Minister, dated August 10, 1863, which appears in 1 Moore *Digest of International Law*, 1906, p. 711.

(f) Hall *International Law* 8th Edition, 1917, pages 126, 127.

(g) Senate Document No. 162, 58th Congress, 2d Session, pages 239-240; page 221, pages 224 to 228 and pages 15 and 16, and Volume 4, Part I, Counter Case of the United States, pages 131-132; Volume 5, Part I, Argument of the United States, pages 14-18; Volume 7, pages 605-611, pages 543-548.

APPENDIX II, Part 3

INDEX TO THE EVIDENCE INTRODUCED BY THE UNITED STATES IN THE PROCEEDING BEFORE WALTER P. ARMSTRONG, JR., SPECIAL MASTER

Exhibit 1	Descriptive Report, Planimetric and Mean-Low Water Line Mapping Projects PH-5903 and 20,000-819 Part I - Mississippi River Delta, T-10944 to T-10957
Exhibit 2	Compilation Report, Mississippi Delta, Louisiana Map Numbers T-10944 through 10957, Bureau of Land Management Numbers 1 through 8
Exhibit 3	Reprint from the International Hydrographic Review, Vol. XXXVIII, No. 1, January 1961, Mapping the Low-Water Line of the Mississippi Delta
Exhibit 4	Descriptive Report, Shoreline and Mean-Low Water Line Mapping - Project 20,000-819 Part II—T11993-T-11997, Atchafalaya Bay
Exhibit 5	Hand held photographs taken during 1960-1961 Atchafalaya Bay Survey and Descriptive Area Maps
Exhibit 6	Aerial Photographs Nos.: L8606 - L8612, L9036, L9035, L9034, L9033, L9032, L9031, L9030, L9029, L8703, L8704, L9003, L9002, L9001

	Field Inspection Photographs Nos.: L8606 - L8609, L8703
Exhibit 7	Aerial Photographs Nos.: L8720 - L8729, L8984 - L8989, 08713, L8991 Field Inspection Photographs Nos.: L8991, L8983, L8985, L8987, L8989, L8727
Exhibit 8	Letter from Wesley A. D'Ewart, Assistant Secretary of the Interior, to William G. Helis, Chairman, Louisiana State Mineral Board, July 11, 1956
Exhibit 9	Letter from William G. Helis, Chairman, Louisiana State Mineral Board, to Wesley A. D'Ewart, Assistant Secretary of the Interior, July 23, 1956
Exhibit 10	Memorandum for the Record, by Earl G. Harrington, Cadastral Engineering Staff Officer, and Donald B. Clement, Cadastral Engineering Officer, for the Interior Department Committee, August 27, 1956
Exhibit 11	Letter from Earl G. Harrington, Chairman, Interior Committee, to Gordon I. Atwater, August 30, 1956
Exhibit 12	Letter from Gordon Atwater to William G. Helis, Jr., Chairman, Louisiana State Mineral Board, September 19, 1956
Exhibit 13	Letter from Gordon Atwater to Earl

G. Harrington, Cadastral Engineering Staff Officer, Bureau of Land Management, September 4, 1956

Exhibit 14 Letter from Earl G. Harrington, Cadastral Engineering Staff Officer, Bureau of Land Manangement, to Gordon Atwater, September 25, 1956

Exhibit 15 Letter from Gordon Atwater to William G. Helis, Jr., Chairman, Louisiana State Mineral Board, January 10, 1957

Exhibit 16 Letter from Gordon Atwater to Donald B. Clement, Acting Cadastral Engineering Staff Officer, Bureau of Land Management, June 12, 1957

Exhibit 17 Letter from Gordon Atwater to Al Glodt, Chairman, Offshore Oeprators Committee, August 9, 1957

Exhibit 18 Letter from Gordon Atwater to T. H. Montgomery, May 28, 1958

Exhibit 19 Letter from Gordon Atwater to Rear Admiral H. Arnold Karo, Director, Coast and Geodetic Survey, June 5, 1958

Exhibit 20 Letter from Gordon Atwater to William Helis, Jr., Committee Chairman, Louisiana State Mineral Board, July 16, 1958

Exhibit 21 Letter from Gordon Atwater and H. M. Hayne, for the State of Louisiana, and Earl G. Harrington and Donald

B. Clement, for the Department of the Interior, to William G. Helis, Jr., Chairman, Louisiana State Mineral Board, August 29, 1958

Exhibit 22 Letter from Gordon Atwater to William G. Helis, Chairman, Louisiana State Mineral Board, February 17, 1959

Exhibit 23 Letter from Gordon Atwater to Earl J. Thomas, Acting Director, Bureau of Land Management, February 23, 1959

Exhibit 24 Letter from Edward Woozley, Director, Bureau of Land Management, to the Director, Coast and Geodetic Survey, March 19, 1959

Exhibit 25 Letter from James C. Tison, Jr., for Rear Admiral H. Harold Karo, Director, Coast and Geodetic Survey, to Gordon Atwater, November 17, 1959

Exhibit 26 Letter from McLain J. Forman to Rear Admiral H. Arnold Karo, Director, Coast and Geodetic Survey, November 19, 1959

Exhibit 27 Letter from Donald B. Clement to Gordon Atwater, November 2, 1961

Exhibit 28 Letter from Gordon Atwater to Donald B. Clement, Consultant, Cadastral Engineering Office, Bureau of Land Management, November 10, 1961

Exhibit 29	Letter from Gordon Atwater to W. Scott Wilkinson, December 1, 1961
Exhibit 30	Report of the Determination of the Contact Line of Mean Low Water of the Gulf of Mexico with the Mainland and Adjacent Islands of the State of Louisiana, by a Committee Representing the U.S. Dept. of Interior and a Committee Representing the State of Louisiana, December 20, 1961
Exhibit 31	John Seldon, *Of the Dominion, or, Ownership of the Sea* (Mare Clausum), transl. by Marchamont Nedham (London, 1652) Book II, Chapter 2, p. 188
Exhibit 32	*The Anna*, 5 Chr. Robinson, Admiralty Reports 373 (1806).
Exhibit 33	Letters from Edward Everett, Ambassador to Great Britain, to Lord Aberdeen, British Foreign Secretary, March 25, 1845, and to James Buchanan, Secretary of State, April 23, 1845, S. Exec. Doc. No. 100, 32d Cong., 1st sess. (1852) pp. 136-140, 152.
Exhibit 34	Seizure in Neutral Waters (the capture of the British ship "Grange" by the French frigate "L' Embuscade" in Delware Bay), 1 *Op. A.G.* 32 (1793).
Exhibit 35	Headland, Sketch of Anacapa Island

in Santa Barbara Channel (1854), United States Coast and Geodetic Survey.

Exhibit 36 Letter from Thomas Bayard, Secretary of State, to Daniel Manning, Secretary of the Treasury, May 28, 1886, in 1 Moore, *Digest of International Law* (1906) 718-721.

Exhibit 37 S. B. Stanton, *The Behring Sea Controversy*, (1892) 52-57.

Exhibit 38 *The Washington*, 4 Moore, *International Arbitrations* (1898), 4342-4344.

Exhibit 39 J. B. Henderson, *American Diplomatic Questions* (1901), 36-37.

Exhibit 40 H. Taylor, *Treatise on International Public Law*, (1901), 137-139, 278-279.

Exhibit 41 Whaling and Sealing Arbitration, Oral Argument of the United States, *Foreign Relations of the United States*, 1902, Appendix I, p. 440.

Exhibit 42 1 Moore, *Digest of International Law*, (1906) pp. 698-713, 730-731, 734-745, 770-771, 783-787, 866-884, 926.

Exhibit 43 River and Harbor Lines, 25 *Op. A.G.* 149 (1906).

Exhibit 44 A. H. Charteris, *Claims of Territorial Jurisdiction in Wide Bays*, (1906-1907) 16 Yale Law Journal 471-496.

Exhibit 45 Corespondence between Carnegie Hero Fund Commission and the Department of State (1909), 3 Letters, Files, United States Department of State, National Archives (Reprinted in 99 Cong. Rec., Part 3, 3622-3623 (1953).

Exhibit 46 North Atlantic Coast Fisheries Arbitration, S. Doc. No. 870, 61st Cong., 3d sess. (1912) Vol. 1, Report of the Agent of the United States, pp. 18-19 (Cong. Doc. Ser. No. 5929).

Exhibit 47 North Atlantic Coast Fisheries Arbitration, S. Doc. No. 870, 61st Cong., 3d sess. (1912) Vol. 1, Award of the Tribunal and Dissenting Opinion of Dr. Drago on Question Five, pp. 92-98, 102-106 (Cong. Doc. Ser. No. 5929).

Exhibit 48 North Atlantic Coast Fisheries Arbitration, S. Doc. No. 870, 61st Cong., 3d sess. (1912) Vol. 8, Argument of the United States, p. 201 (Cong. Doc. Ser. No. 5936).

Exhibit 49 North Atlantic Coast Fisheries Arbitration, S. Doc. No. 870, 61st Cong., 3d sess. (1912) Vol. 10, Oral Argument of Charles B. Warren for the United States, pp. 1000-1001, 1012-1015, 1078-1989, 1094-1095, 1122-1126, 1201-1227 (Cong. Doc. Ser. No. 5938).

Exhibit 50 North Atlantic Coast Fisheries Ar-

bitration, S. Doc. No. 870, 61st Cong., 3d sess. (1912) Vol. 11, Oral Argument of Elihu Root for the United States, pp. 2150-2153, 2161, 2166-2169 (Cong. Doc. Ser. No. 5939).

Exhibit 51 *Position Taken By This Government in Its Diplomatic Correspondence with Respect to the Three-Mile Limit and Its Extension*, Memorandum by the Office of the Solicitor, Department of State, Nov. 30, 1921. Files, United States Department of State, National Archives.

Exhibit 52 Henry S. Fraser, *The Extent and Delimitation of Territorial Waters*, (1926) 11 Cornell L. Q. 455.

Exhibit 53 Memorandum by the Office of the Solicitor, Department of State, March 2, 1926. Files, United States Department of State, National Archives.

Exhibit 54 Letter from W. R. Castle, Jr., for the Secretary of State, to O. C. Kiep, German Charge' d' Affaires ad interim, Oct 6, 1927. United States Department of State, National Archives.

Exhibit 55 *A compilation of the Provisions of Law in Force in the United States in Regard to Territorial Waters*, Memorandum of Department of State, acocmpanying letter of Oct. 6, 1927, above. Files, United States

Department of State, National Archives.

Exhibit 56 Letter from E. F. Morgan, Acting Secretary of Commerce, to the Secretary of State [Frank B. Kellogg] Apr. 24, 1928. Files, United States Department of State, National Archives.

Exhibit 57 Letter from the Secretary of State to H. H. Bachke, Norwegian Minister (July 11, 1928). Files, United States Department of State, National Archives.

Exhibit 58 *Territorial Waters and Fishery Boundaries,* Memorandum by the Treaty Division, Department of State, Dec. 7, 1928. Files, United States Department of State, National Archives.

Exhibit 59 Memorandum by the Treaty Division, Department of State, Dec. 8, 1928. Files, United States Department of State, National Archives.

Exhibit 60 Memorandum by the Officer of the Solicitor, Department of State, Dec. 17, 1928. Files, United States Department of State, National Archives.

Exhibit 61 Memorandum by the Division of Western European Affairs, Department of State, Jan. 15, 1929. Files, United States Department of State, National Archives.

Exhibit 62 Memorandum by the Treaty Division, Department of State, Jan. 18, 1929. Files, United States Department of State, National Archives.

Exhibit 63 Memorandum by the Treaty Division, Department of State, Jan. 19, 1929. Files, United States Department of State, National Archives.

Exhibit 64 Letter from W. R. Castle, Jr., for the Secretary of State, to the Secretary of the Navy[Charles Francis Adams], Apr. 22, 1929. Files, United States Department of State, National Archives.

Exhibit 65 Letter from W. R. Castle, Jr., for the Secretary of State, to the Secretary of the Treasury [Andrew W. Mellon], Apr. 22, 1929. Files, United States Department of State, National Archives.

Exhibit 66 Letter from C. F. Adams, Secretary of the Navy, to the Secretary of State [Charles Evans Hughes], May 8, 1929. Files, United States Department of State, National Archives.

Exhibit 67 Letter from W. R. Castle, Jr., for the Secretary of State, to the Secretary of the Treasury [Andrew W. Mellon], May 13, 1929. Files, United States Department of State, National Archives.

Exhibit 68 Letter from W. R. Castle, Jr., for

the Secretary of State, to Alexis H.G.O. Lundh, Norwegian Charge' d'Affairs ad interim, July 13, 1929. Files, United States Department of State, National Archives.

Exhibit 69 League of Nations, Conference for the Codification of International Law, Bases of Discussion, Territorial Waters, Vol. 2, p. 38 (1929).

Exhibit 70 League of Nations, Conference for the Codification of International Law, Bases of Discussion, Territorial Waters, Vol. 2, p. 41 (1929).

Exhibit 71 League of Nations, Conference for the Codification of International Law, Bases of Discussion, Territorial Waters, Vol. 2, p. 44 (1929).

Exhibit 72 League of Nations, Conference for the Codification of International Law, Bases of Discussion, Vol. 2, Territorial Waters, 1929, pp. 48-51.

Exhibit 73 League of Nations, Conference for the Codification of International Law, Bases of Discussion, Territorial Waters, Vol. 2, p. 143 (1929).

Exhibit 74 League of Nations, Acts of the Conference for the Codification of International Law. Meetings of the Committees, Vol. III, Minutes of the Second Committee; Territorial Waters (C. 351 (b). M. 145 (b). 1930. V) pp. 179-180, 195-200, 205-209, 217-220.

Exhibit 75 S. W. Boggs, *Delimitation of the Territorial Sea*, 24 American Journal of International Law (1930) 541-555.

Exhibit 76 *U. S. Coast Guard Boarding Manual* (1931) 3, 15, 16.

Exhibit 77 1 Hackworth, *Digest of International Law* (1940) 625-626, 634, 643-645.

Exhibit 78 Letter from S. W. Boggs, for the Secretary of State, to R. J. Allison, Washington National Insurance Co., Feb. 20, 1941. Files, United States Department of State, National Archives.

Exhibit 79 U.S. Coast Guard Institute, *Admiralty Law Enforcement* (1943) 24-27.

Exhibit 80 Annex 42 to the British Reply, 2 *Pleadings, Oral Arguments, Documents, Fisheries Case, I.C.J.*, pp. 752-753 (1951).

Exhibit 81 British Reply, Fisheries Case, Vol. 2, Annex 42, Fig. 1, facing p. 32.

Exhibit 82 Annexes 46 and 47 to the British Reply, 2 *Pleadings, Oral Arguments, Documents, Fisheries Case, I.C.J.*, pp. 763-764 (1951).

Exhibit 83 Note from United States to Egypt, June 4, 1951, and note from the United States to Ecuador, June 7, 1951, 4 *Pleadings, Oral Arguments,*

Documents, Fisheries Case, I.C.J., pp. 603-604, (1951).

Exhibit 84 Judgment, *Fisheries Case*, I.C.J. Reports (1951) 116 at 128.

Exhibit 85 Judgment, *Fisheries Case*, I.C.J. Reports (1951) 116 at 132.

Exhibit 86 Judgments, *Fisheries Case*, I.C.J. Reports (1951) 116 at 139.

Exhibit 87 S. W. Boggs, *Delimitation of Seaward Areas Under National Jurisdiction* (1951), 45 American Journal of International Law, pp. 240-266 (reprint).

Exhibit 88 Report of the Special Master (Under Order of December 3, 1951) (1952), United States Supreme Court Records, *United States* v. *California*, No. 6, Original, October Term, 1952 (Now No. 5, Original).

Exhibit 89 A. L. Shalowitz, *The Concept of a Bay as Inland Waters*, (1953), 13 Surveying and Mapping, pp. 432-440 (reprint).

Exhibit 90 Letter from Francis P. Whitechair, Secretary of the Navy, to Emanuel Celler, Chairman, House Committee on the Judiciary, April 25, 1952; Hearings, S. Committee on Interior and Insular Affairs, S. J. Res. 13, 83 Cong., 1st sess. (1953) pp. 135-136.

Exhibit 91 Fitzmaurice, *The Law and Procedure*

of the International Court of Justice 1951-54: General Principles and Sources of Law (1953) 30 British Yearbook of International Law, 1, 27.

Exhibit 92 Letter, from Thruston B. Morton, for the Secretary of State, to Senator Hugh Butler, Chairman, Senate Committee on Interior and Insular Affairs, March 4, 1953; Letter, from Senator Henry M. Jackson to John Foster Dulles, Secretary of State, February 12, 1953; Letter, from Thruston B. Morton, for the Secretary of State, to Senator Henry M. Jackson, March 6, 1953. Hearings, S. Committee on Interior and Insular Affairs, S. J. Res. 13, 83rd Cong., 1st sess. (1953) pp. 27, 28, 1086, 1087, 1088.

Exhibit 93 Letter, from James E. Webb, Under Secretary of State, to J. Howard McGrath, Attorney General, November 13, 1951; Letter, from Dean Acheson, Secretary of State, to J. Howard McGrath, Attorney General, February 12, 1952. Hearings, S. Committee on Interior and Insular Affairs, S. J. Res. 13, 83rd Cong., 1st sess. (1953) pp. 460-462.

Exhibit 94 United States Coast Guard, *Law Enforcement Manual* (CG-6T) (1954), p. 3-7.

Exhibit 95 Draft Articles on the Law of the Sea,

Article 4 and Commentary, Report of the International Law Commission to the General Assembly Covering the Work of its Eighth Session, 2 *Yearbook of the I.L.C., 1956*, pp. 266-267.

Exhibit 96 Draft Articles on the Law of the Sea, Article 4 and Comment, Report of the Initernational Law Commission to the General Assembly Covering the Work of its Seventh Session, 2 *Yearbook of the I.L.C., 1955*, p. 35.

Exhibit 97 *Historic Bays*,Memorandum by the Secretariat of the United Nations, United Nations Conference on the Law of the Sea, Official Records, Vol. 1; Preparatory Documents (A/CONF. 13/37) (1958), pp. 1-38.

Exhibit 98 Bishop, *Cases and Materials on International Law* (1962), pp. 500-501.

Exhibit 99 *Juridical Regime of Historic Waters, Including Historic Bays*, Study prepared by the Secretariat, United Nations Document A/CN.4/143, 9 March 1962.

Exhibit 100 Letter, from Abram Chayes, for the Acting Secretary of State, to Frank J. Barry, Solicitor, Department of the Interior, May 3, 1962; Files, Department of Justice.

Exhibit 101	Strohl, *International Law of Bays* (1963) 63.
Exhibit 102	Letter, from Dean Rusk, Secretary of State, to Robert F. Kennedy, Attorney General, January 15, 1963; Files, Department of Justice.
Exhibit 103	Diagram of Monterey Bay; Brief in Support of the Exceptions of the State of California to the Report of the Special Master dated October 14, 1952, Pursuant to Court Order of December 2, 1963, *United States* v. *California*, S. Ct. No. 5, Original, October Term, 1963, Vol. 2, Appendices, facing p. 152.
Exhibit 104	Convention on the Territorial Sea and the Contiguous Zone, 15 U.S.T., Part 1, pp. 1608-1614.
Exhibit 105	*Selected Materials on Coast Guard Law Enforcement* (1964), p. 4-5.
Exhibit 106	2 Shalowitz, *Shore and Sea Boundaries* (1964), pp. 104-105.
Exhibit 107	Letter, from Vice Admiral P. E. Trimble, Acting Commandant, United States Coast Guard, to Senator Allen J. Ellender, August 15, 1967; Files, United States Coast Guard, Washington, D.C.
Exhibit 108	Letter, from Leonard C. Meeker, Legal Adviser, Department of State, to Erwin Griswold, Solicitor General, April 8, 1969; Files, Department of Justice.

Exhibit 109 Letter, from Leonard C. Meeker, Legal Adviser, Department of State, to Shiro Kashiwa, Assistant Attorney General, July 3, 1969; Files, Department of Justice.

Exhibit 110 Letter, from John N. Mitchell, Attorney General, to William P. Rogers, Secretary of State, January 30, 1970; Files, Department of State.

Exhibit 111 Address by The Honorable John R. Stevenson, The Legal Adviser of the Department of State, Department of State Press Release No. 49, February 18, 1970, United States Department of State, Press Release. Reprinted in 62 State Department Bull. 339-343.

Exhibit 112 President's Report to the Congress, United States Foreign Policy for the 1970's; A New Strategy for Peace. Weekly Compilation of Presidential Documents, Vol. 6, No. 8, (February 23, 1970), p. 226.

Exhibit 113 U. S. Position on Territorial Sea, Department of State Press Release No. 64, February 25, 1970.

Exhibit 114 Letter, from William P. Rogers, Secretary of State, to John N. Mitchell, Attorney General, April 14, 1970; Files, Department of Justice.

Exhibit 115 Act No. 452, July 19, 1962, Louisiana Session Laws, 1962, pp. 909-911.

Exhibit 116 *Development of the So-Called Chapman Line*; Memorandum by Earl J. Harrington, June 27, 1956. Files, United States Department of the Interior, Bureau of Land Management, Washington, D. C.

Exhibit 117 Chapman Line (Description). Files, United States Department of Justice.

Exhibit 118 Letter from Oscar L. Chapman, Secretary of the Interior, to O. G. Collins, Chairman, Louisiana State Mineral Board, July 20, 1951. 97 *Cong. Rec.* 9170-9171 (1951).

Exhibit 119 Excerpt from Minutes of July 20, 1956, Meeting of State Mineral Board. Produced by Counsel for Louisiana during the Deposition of Dr. Gordon Atwater, July 15, 1970.

Exhibit 120 Letter from Robert W. Knox, Assistant Director, U. S. Coast and Geodetic Survey, to Donald Clement, Bureau of Land Management, Jan. 28, 1957. Files, Department of the Interior, Bureau of Land Management. Washington, D. C.

Exhibit 121 Letter from Mr. Earl G. Harrington, for the Director, Bureau of Land Management, to Gordon Atwater, Jan. 30, 1957. Files, Department of the Interior, Bureau of Land Management, Washington, D. C.

Exhibit 122 Letter from Mr. Earl G. Harrington, for the Director, Bureau of Land

Management, to Gordon Atwater, Feb. 6, 1957. Files, Department of the Interior, Bureau of Land Management, Washington, D. C.

Exhibit 123 Letter from Gordon Atwater to Edward Woozley, Director, Bureau of Land Management, Feb. 8, 1957. Files, Department of the Interior, Bureau of Land Management, Washington, D. C.

Exhibit 124 Letter from Gordon Atwater to Earl J. Harrington, Feb. 8, 1957. Files, Department of the Interior, Bureau of Land Management, Washington, D. C.

Exhibit 125 Letter from Edward Woozley, Director, Bureau of Land Management, to the Director, U.S. Coast and Geodetic Survey, February 14, 1957. Files, Department of the Interior, Bureau of Land Management, Washington, D.C.

Exhibit 126 Letter from Edward Woozley, Director, Bureau of Land Management, to Gordon Atwater, Feb. 14, 1957. Files, Dept. of the Interior, Bureau of Land Management, Washington, D.C.

Exhibit 127 Memorandum from Earl G. Harrington, Cadastral Engineering Staff Officer, Bureau of Land Management, Department of the Interior, to the Solicitor, Department of Interior,

Mar. 18, 1957. Files, Department of the Interior, Bureau of Land Management, Washington, D.C.

Exhibit 128 Letter from Edward Woozley, Director, Bureau of Land Management, to Gordon Atwater, Mar. 19, 1959. Files, Dept. of the Interior, Bureau of Land Management, Washington, D.C.

Exhibit 129 Letter from Gordon Atwater to Edward Woozley, Director, Bureau of Land Management, Department of the Interior, April 9, 1959. Files, Department of the Interior, Bureau of Land Management, Washington, D.C.

Exhibit 130 Mississippi River Commission, Corps of Engineers, United States Army, *Annual Maximum, Minimum and Mean Discharges of the Mississippi River and Its Outlets and Tributaries to 1963*, pp. 31-32.

Exhibit 131 Mississippi River Commission, Corps of Engineers, U.S. Army, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1940, p. 51.

Exhibit 132 Mississippi River Commission, Corps of Engineers, U.S. Army, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1946, p. 49, 229 and 230.

Exhibit 133 Mississippi River Commission, Corps of Engineers, U.S. Army, *Stages and*

Discharges Mississippi River and Its Outlets and Tribuaries, 1949, p. 46.

Exhibit 134 Mississippi River Commission, Corps of Engineers, U.S. Army, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1949, p. 46.

Exhibit 135 Mississippi River Commission, Corps of Engineers, U.S. Army, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1954, p. 46.

Exhibit 136 Mississippi River Commission, Corps of Engineers, U.S. Army, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1956, p. 48.

Exhibit 137 Mississippi River Commission, Corps of Engineers, U. S. Army, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1957, p. 48.

Exhibit 138 Mississippi River Commission, Corps of Engineers, U. S. Army *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1958, p. 47

Exhibit 139 Mississippi River Commission, Corps of Engineers, U. S. Army, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1960, p. 48.

Exhibit 140 Mississippi River Commission, Corps of Engineers, U. S. Army, *Stages and Discharges Mississippi River and Its Tributaries*, 1960, p. 53.

Exhibit 141 Mississippi River Commission, Corps of Engineers, U. S. Army, *Stages and*

Discharges Mississippi River and Its Outlets and Tributaries, 1961, p. 53.

Exhibit 142 Mississippi River Commission, Corps of Engineers, U. S. Army, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1965, pp. 5-6.

Exhibit 143 Draft page of U. S. Army, Corps of Engineers, New Orleans District, *Stages and Discharges Mississippi River and Its Outlets and Tributaries*, 1969.

Exhibit 144 Published Nautical Chart 1272, Mississippi River Delta, 24th Ed., Dec. 6, 1969.

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Exhibit 146 Report, S. Committee on Transportation Routes to the Seaboard, on Senate Bills 178 and 577. S. Rept. No. 373, 43d Congress, 1st Sess. (1874), pp. 1-8.

Exhibit 147 The Jetties and the Mississippi River Improvement; Grand Banquet to Capt. James B. Eads, Report of the Proceedings, Library of Congress, Catalogue No. TA140 E2 G4

Exhibit 148 Affidavit of Sam Sutton, Chief, Reproduction Branch, U. S. Army Corps of Engineers, New Orleans District, Aug. 17, 1970.

Exhibit 149	U. S. Army, Corps of Engineers Photographs 8468-3.
Exhibit 150	U. S. Army, Corps of Engineers Photograph 11872-5.
Exhibit 151	U. S. Army, Corps of Engineers Photograph 11872-20.
Exhibit 152	U. S. Army, Corps of Engineers Photograph 11880-1.
Exhibit 153	U. S. Army, Corps of Engineers Photograph 7833-27.
Exhibit 154	U. S. Army, Corps of Engineers Photograph 11872-19.
Exhibit 155	Photograph, Frame B: South Pass Entrance looking east along the hook, June 9, 1962. Woods Hole Oceanographic Institution Data Library, Woods Hole, Mass.
Exhibit 156	Photograph, Frame C: The hook at South Pass Entrance, June 9, 1962. Woods Hole Oceanagraphic Institution Data Library, Woods Hole, Mass.
Exhibit 157	United States Department of the Interior, Noncompetitive Oil and Gas Lease, Serial Number BLM A-040049. Files, United States Department of the Interior, Bureau of Land Management, Washington, D. C.
Exhibit 158	Aerial Photomosaic, Pass a Loutre. Files, Liskow and Lewis, 225 Baronne St., New Orleans, Louisiana.

Exhibit 159	Letter dated March 20, 1963, from Austin W. Lewis to Archibald Cox, Solicitor General. Files Department of Justice.
Exhibit 160	Photographs Nos. 1, 2, 5, 6, 7, 10, 11, 12, 14 15 and 17 taken by S. V. Asbury Jr., May 31, 1960. Files, Department of Justice, Washington, D. C.
Exhibit 160A	Reproduction of part of Map 2 of 8, showing location of Asbury photographs.
Exhibit 160B	Original contact prints of Asbury photographs (introduced for inspection and withdrawn, subject to re-examination if necessary).
Exhibit 161	Affidavit of Mr. Jonathan I. Charney, Attorney, Department of Justice, Washington, D. C., August 31, 1971.
Exhibit 162	Photographs A and B taken by Jonathan I. Charney, June 20, 1970.
Exhibit 163	Photograph, Frame A: Southeast Pass looking north from the Gulf of Mexico, June 9, 1962. Woods Hole Oceanographic Institution Data Library, Woods Hole, Mass.
Exhibit 164	A portion of U.S.C. & G.S. Topographic Survey Number 3630 (1916) (mounted).
Exhibit 164-A	Same, unmounted (originally num-

bered 164; renumbered 164A, January 26, 1971).

Exhibit 165 A portion of U.S.C. & G.S. Hydrographic Survey Number 6637 (1946) (mounted).

Exhibit 165A Same, unmounted (originally numbered 165; renumbered 165A, January 26, 1971).

Exhibit 166 Permit issued May 21, 1956, to Gulf Refining Company by the Corps of Engineers, U. S. Army. Files, United States Army Engineer District, New Orleans, Corps of Engineers, P.O. Box 60267, New Orleans, Louisiana.

Exhibit 167 Letter from Lt. Col. R. G. Hodes to Gulf Refining Company, May 22, 1956. Files, Corps of Engineers, U.S. Army, United States Army Engineer District, New Orleans, Corps of Engineers, P.O. Box 60267, New Orleans, Louisiana.

Exhibit 168 Letter, from J. A. Austin, District Service Manager, Gulf Oil Corporation, to U.S. Army District Engineer. Files, Gulf Oil Corp., P.O. Box 61590, New Orleans, Louisiana.

Exhibit 169 Letter, from J. A. Austin to U.S. Army District Engineer, July 6, 1959. Files, Gulf Oil Corp., P.O. Box 61590, New Orleans, Louisiana 70160.

Exhibit 170 Bill from Circle Dredging Co., Inc.,

to Gulf Oil Corporation, August 20, 1959. Files, Gulf Oil Corp., P. O. Box 61590 New Orleans, Louisiana 70160.

Exhibit 171 Sheets 1A and 1 of 14 to accompany Gulf Oil Corp. application dated March 28, 1956. Files, Gulf Oil Corp., P.O. Box 61590, New Orleans, Louisiana 70160.

Exhibit 172 Letter, from J. A. Austin to U. S. Army, District Engineer, September 28, 1959. Files, Gulf Oil Corp., P.O. Box 61590, New Orleans, Louisiana 70160.

Exhibit 173 Letter, from J. A. Austin to U. S. Army District Engineer, September 29, 1959. Files, Gulf Oil Corp., P.O. Box 61590, New Orleans, Louisiana 70160.

Exhibit 174 Letter, from J. A. Austin to U. S. Army District Engineer, December 3, 1959. Files, Gulf Oil Corp., P.O. Box 61590, New Orleans, Louisiana 70160.

Exhibit 175 Letter from J. A. Austin to U. S. Army District Engineer, December 21, 1959. Files, Gulf Oil Corp., P.O. Box 61590, New Orleans, Louisiana 70160.

Exhibit 176 Photograph, Frame D: Pass Tante Phine Entrance viewed from the west, June 9, 1962. Woods Hole Oceanographic Institution Data Library, Woods Hole, Mass.

Exhibit 177 Photograph, Frame E: Pass Tante Phine entrance viewed from the west, June 9, 1962. Woods Hole, Oceanographic Institution Data Library, Woods Hole, Mass.

Exhibit 177 Photograph, Frame E: Pass Tante Phine entrance viewed from the west, June 9, 1962. Woods Hole Oceanographic Institution Data Library, Woods Hole, Mass.

Exhibit 178 Photograph, Frame F: Dredged area north of Pass Tante Phine Entrance, June 9, 1962. Woods Hole Oceanographic Institution Data Library, Woods Hole, Mass. 02543.

Exhibit 179 Hydrographic Survey, Pass Tante Phine Spoil Bank, August 4, 1966. U.S. Corps of Engineers, New Orleans, District.

Exhibit 180 A Portion of U.S.C. & G.S. Hydrographic Survey Number 6172 (1936). U.S. Coast and Geodetic Survey.

Exhibit 181 Department of Transportation, United States Coast Guard, *Light List, Vol. II, Atlantic and Gulf Coast of the United States* (1968) pp. 247-48.

Exhibit 182 Office Memorandum, from Lt. Robert C. Phillips, USCG, to Chief, Aids to Navigation Section, July 3, 1953. Files, United States Coast Guard, 8th District.

Exhibit 183	Letter from Jules Minnich, Terrebonne-LaFourche Boatmen's Association, to the Commandant, U.S.C.G., 8th District, July 7, 1955. Files, United States Coast Guard, 8th District.
Exhibit 184	Project Report for Advance Program of Acquisition, Construction and Improvement, dated October 1, 1953. Files, United States Coast Guard, 8th District.
Exhibit 185	Aids to Navigation Operation Request, dated December 8, 1953. Files, United States Coast Guard, 8th District.
Exhibit 186	Letter from Mr. Ralph B. Bisland, Secretary Treasurer, Terrebonne Parish Police Jury, to Commander Coast Guard, Eighth Naval District, May 29, 1957. Files, United States Coast Guard, 8th District.
Exhibit 187	Affidavit of Jonathan I. Charney, Attorney, Department of Justice, Washington, D. C.
Exhibit 188	Photographs C and D taken by Jonathan I. Charney, June 20 and 22, 1970.
Exhibit 189	Photographs E and F taken by Jonathan I. Charney, June 20, 1970.
Exhibit 190	Affidavit of Mrs. D. T. Atkinson.
Exhibit 190A	Photograph Roll 5-A No. 7 taken by John R. May, Geographer, Geology

	Branch, Waterways Experiment Station, Vicksburg, Mississippi, June 22, 1970.
Exhibit 191	A portion of U.S.C. & G.S. Hydrographic Survey Number 5537 (1934) (mounted).
Exhibit 191A	Same, unmounted (originally numbered 191; renumbered 191A, January 26, 1971).
Exhibit 192	Affidavit of Jonathan I. Charney, Department of Justice, Washington, D. C. 20530.
Exhibit 193	Photograph G taken by Joanthan I. Charney.
Exhibit 194	Photograph, Frame G: Point au Fer viewed from the west, June 10, 1962. Woods Hole Oceanographic Institution Data Library, Woods Hole, Mass. 02543.
Exhibit 195	Executive Order, Reservation of Shell Keys for a Light House, July 9, 1855. National Archives, Washington, D.C.
Exhibit 196	Executive Order, Shell Keys Reservation, August 17, 1907. National Archives, Washington, D. C.
Exhibit 197	Photograph, Frame H: Southern Shore of Marsh Island, June 10, 1962. Woods Hole Oceanographic Institution Data Library, Woods Hole, Mass. 02543.

Exhibit 198 Photograph, Frame I: Southern Shore of Marsh Island, June 10, 1962. Woods Hole Oceanographic Institution Data Library, Woods Hole, Mass. 02543.

Exhibit 199 Photograph 66-HC-1793, Western Coast of Louisiana, Gemini Flight 9, Magazine 9, Frame 40, Height- 160 nautical miles, September 14, 1966, National Aeronautics Service Administration.

Exhibit 200 Report to Bureau of Land Management, Mean Low Water Line Survey for Nine Specific Areas, Mississippi River Delta Louisiana, Mississippi River Delta Louisiana, 1970 (In ten volumes). U. S. Coast and Geodetic Survey.

Exhibit 201 Maps Illustrative of Issues. United States Department of Justice.

Exhibit 202 *Geological Observations on the Origin, Nature and Distribution of Mudlumps, Barrier Islands and Oyster Reefs of Coastal Louisiana*, by C. R. Kolb and R. T. Saucier (August 1970).

Exhibit 203 *Appendix A of Geological Observations on the Origin, Nature and Distribution of Mudlumps, Barrier Islands and Oyster Reefs of Coastal Louisiana*, by C. R. Kolb and R. T. Saucier (August 1970).

Exhibit 204 Affidavit of Mr. R. J. Simon.

Exhibit 205	Affidavit of Mr. Ellwood Ott.
Exhibit 206	Affidavit of Mr. E. T. Oliver.
Exhibit 207	Affidavit of Mr. Harland R. Cravat.
Exhibit 208	Affidavit of Mr. Harland R. Cravat.
Exhibit 209	Affidavit of Mr. Erwin L. Methe.
Exhibit 210	Affidavit of Mr. Erwin L. Methe.
Exhibit 211	Affidavit of Mr. D. T. Atkinson.
Exhibit 212	Affidavit of Mr. Paul W. Scoggan.
Exhibit 213	Aerial Photographs Nos.: INO-1-204, INO-1-154, INO-1-158
Exhibit 214	Aerial Photographs Nos.: 25, 24, 23, 22, 21, 20, of V311RW M1063
Exhibit 215	Aerial Photographs Nos.: M-16-90A-4, M-16-90-70, M-16-90A-2
Exhibit 216	Aerial Photographs Nos.: M-17-89-42, M-17-88-3
Exhibit 217	Aerial Photographs Nos.: 724-190 - 724-194
Exhibit 218	Aerial Photographs Nos.: 724-204, 724-203, 724-202, 724-201, 724-200
Exhibit 219	Aerial Photographs Nos.: 24-104 - 24-107
Exhibit 220	Aerial Photographs Nos.: 24-116, 24-115, 24-114
Exhibit 221	Aerial Photographs Nos.: 927-932
Exhibit 222	Aerial Photographs Nos.: 591-596
Exhibit 223	Aerial Photographs Nos.: 547X2-551X2

Exhibit 224	Aerial Photographs Nos.: 325X3, 326X3, 343X3, 342X3, 341X3, 355X3, 356X3
Exhibit 225	Aerial Photographs Nos.: L6947 - L6952
Exhibit 226	Aerial Photographs Nos.: 7-59 142 - 7-59 145
Exhibit 227	Aerial Photographs Nos.: L8845, L9092, L9091, L9121
Exhibit 228	Aerial Photographs Nos.: 9-60 61, 9-60 62
Exhibit 229	Aerial Photographs Nos.: 6-61-113, 6-61-112, 6-61-110, 6-61-111
Exhibit 230	Aerial Photographs Nos.: 6052-7-90 - 6052-7-92
Exhibit 231	Aerial Photographs Nos.: S8991 - S8996
Exhibit 232	Aerial Photographs Nos.: 59-67, 59-65, 59-59, 59-61, 59-64, 59-63
Exhibit 233	Aerial Photographs Nos.: 57-171, 57-172, 57-174, 57-173
Exhibit 234	Aerial Photographs Nos.: INO-1-94, INO-1-88
Exhibit 235	Aerial Photographs Nos.: INO-2-46, INO-2-3
Exhibit 236	Aerial Photographs Nos.: R182-59-A-6, R182-59-A-5, R182-59-A-4, R182-59A-3, R182-59-A-2
Exhibit 237	Aerial Photographs Nos.: R182-59-B-41 - R182-59-B-43

Exhibit 238	Aerial Photographs Nos.: M21-93-66 and M21-92-41 - M21-92-45
Exhibit 239	Aerial Photographs Nos.: 289, 288, 287, 286, 285, 284
Exhibit 240	Aerial Photographs Nos.: 578 - 580
Exhibit 241	Aerial Photographs Nos.: 914, 915
Exhibit 242	Aerial Photographs Nos.: 27-27, 24-186, 24-190, 24-141
Exhibit 243	Aerial Photographs Nos.: 705 33E 2619, 705 33E 2618, 705 33E 2617
Exhibit 244	Aerial Photographs Nos.: 724-83, 724-84, 724-85
Exhibit 245	Aerial Photographs Nos.: 724-95 - 724-97
Exhibit 246	Aerial Photographs Nos.: 217X3, 218X3, 265X3, 264X3, 269X3, 314X3
Exhibit 247	Aerial Photographs Nos.: L6967, L6966, L6965, L6964
Exhibit 248	Aerial Photographs Nos.: 052-5-68 - 6052-5-70
Exhibit 249	Aerial Photographs Nos.: 60-37, 60-35, 60-36, 60-4, 60-3, 60-2, 60-1
Exhibit 250	Aerial Photographs Nos.: L8287R, L8286R, L8285R, L8284R, L8283R, L8282R, L8281R, L8280R, L8279R, E4982, E4981, E4980, E4979, E4978, E4977, E4976, E4975, L8188R, L8187R, L8186R, L8185R, L8184R, L8183R, L8182R, L8181R, E4879,

	E4878, E4877, E4876, E4875, E4874, E4873, E4872.
Exhibit 251	Aerial Photographs Nos.: L8091R, L8090R, L8089R, L8088R, L8087R, L8086R, L8085R, L8084R, L8083R, E4780, E4779, E4778, E4777, E4776, E4775, E4774, E4773, E4772, L8323R, L8322R, L8321R, L8320R, L8319R, L8318R, L8317R, L8316R, E5019, E5018, E5017, E5016, E5015, E5014, E5013, E5012.
Exhibit 252	Aerial Photographs Nos.: E5035 - E5049, L8339R - L8353R
Exhibit 253	Coastline Undisputed
Exhibit 254	Coastline Disputed
Exhibit 254A	Coastline Disputed Revised December 10, 1970
Exhibit 255	Undisputed Offshore Line
Exhibit 256	Offshore Line Disputed
Exhibit 256A	Offshore Line Disputed Revised December 10, 1970
Exhibit 257	Sheet L36, Photomosaic, Ammann International, San Antonio, Texas.
Exhibit 258	Sheet L37, Photomosaic, Ammann International, San Antonio, Texas.
Exhibit 259	Uncontrolled mosaic prepared from aerial photos flown Dec. 1968, Photo 71, File No. 8-3, Corps of Engineers, U.S. Army Engineer District, New Orleans.

Exhibit 260	Uncontrolled mosaic prepared from aerial photos flown Dec. 1968, and March 1969, Photo 83, File No. 8-3, Corps of Engineers, U.S. Army Engineer District, New Orleans.
Exhibit 261	Affidavit of Donald B. Wilson
Exhibit 262	Affidavit of Harland T. Cravat, U.S.C. & G.S.
Exhibit 263	Affidavit of William M. Dunkle, Jr., Woods Hole Oceanographic Institute

HEARINGS IN NEW ORLEANS

Exhibit 264A	Sketch of an eroding bay, by Leo Bouchez.
Exhibit 265	Sketch of average penetration of a bay, by Leo Bouchez.
Exhibit 266	Bureau of Land Management leasing map, Louisiana outer continental shelf, showing leases maintained under section 6 of the Outer Continental Shelf Lands Act.
Exhibit 267	Map showing route of coast flight by Special Master and counsel, October 18, 1970 (two sheets).
Exhibit 268A	Bennett G. Jones deposition, vol. 1.
Exhibit 268B	Bennett G. Jones deposition, vol. 2.
Exhibit 269	Gordon Atwater deposition.
Exhibit 270	Newton Beauvais deposition.
Exhibit 271	Sketch of sine curve wave and mudlump (accompanying cross-examination of Curtis L. Buttorff).

Exhibit 272	Sketch of Mudlump 90, by Curtis L. Buttorff.
Exhibit 273	Letter of April 29, 1959, from Mr. Austin, Gulf Oil Company to the Corps of Engineers, U.S. Army.
Exhibit 274	Letter of June 11, 1964, from Mr. Price, Gulf Oil Company, to the Corps of Engineers, U.S. Army.
Exhibit 275	Bureau of Land Management records of leases maintained under section 6 of the Outer Continental Shelf Lands Act.
Exhibit 276	Report on Wind and Weather Conditions, by Arthur Cooperman.
Exhibit 277	Map of Shell Keys (Copy of No. 17 in U.S. Exh. No. 201) marked by Alexander Melamid to delimit the mainland.
Exhibit 278A	Map of Isle Dernier (copy of No. 14 in U.S. Exh. No. 201) showing route of David Morgan - Frederick Ellis trip, September 5, 1970.
Exhibit 278B	Xerox copy of part of Map 19 of 41, showing location of David Morgan photo No. 1.
Exhibit 278C	Same, photo No. 2
Exhibit 278D	Same, photo No. 3
Exhibit 278E	Xerox copy of part of Map 19 of 41, showing location of David Morgan photo No. 4.
Exhibit 278F	Same, photo No. 5.

Exhibit 278G Same, photo No. 6.

Exhibit 279 Notes by Mr. Francis Zimmerman.

HEARINGS IN WASHINGTON

Exhibit 280

1. Letter, October 24, 1969, to Victor Sachse from George Swarth, submitting three informal survey interrogatories.
2. Letter, February 24, 1970, to Frederick W. Ellis from Jonathan Charney, enclosing transcript of Rhode Island Conference of 1966.
3. Letter, April 28, 1970, to Louis F. Claiborne from Frederick Ellis, enclosing their replies to our three survey interrogatories of October 24, 1969.

Exhibit 281

1. Letter, January 20, 1970, to Victor Sachse from George Swarth, submitting interrogatories to the State of Louisiana.
2. Letter, May 7, 1970, to Walter Armstrong from Frederick Ellis, enclosing Preliminary Response to the Informal Interrogatories Addressed by the United States to the State of Louisiana on January 20, 1970.
3. Letter, August 19, 1970, to Peter Strauss from Frederick Ellis enclosing exhibit "Bucket Bend Bay" to satisfy interrogatories of January 20, 1970.

Exhibit 282

1. Letter, April 8, 1970, to Victor Sachse from Jonathan Charney, requesting minutes of the Louisiana State Mineral Board on the subject of mean low-water line survey from 1956-1961.
2. Letter, April 21, 1970, to Jonathan Charney from Victor Sachse, advising State Mineral Board is gathering the material requested.
3. Letter, August 7, 1970, to Jonathan Charney from Victor Sachse, advising he had felt the request was satisfied but inform him of what we desire and he will again request if from the State Mineral Board.
4. Letter, August 17, 1970, to Victor Sachse from George Swarth, advising him of the materials we want from the State Mineral Board.

Exhibit 283

1. Letter, July 1, 1970, to Victor Sachse from George Swarth, submitting First Formal Interrogatories to the Defendant, State of Louisiana and Request for Production of Documents Number One.
2. Answers and Objections of the Defendant, State of Louisiana, to the First Formal Interrogatories and Request for Production of

Documents Number One of the United States, dated Aug. 5, 1970.

Exhibit 284

1. Letter, August 14, 1970, to Victor Sachse from George Swarth, submitting United States First Formal Request for Admissions.

2. Letter, September 15, 1970, to Peter Strauss from Frederick Ellis, enclosing the State of Louisiana's Answer to First Formal Request for Admissions.

Exhibit 285

1. United States Second Formal Request for Admissions, dated August 19, 1970.

2. Response to United States Second Formal Request for Admissions, dated September 18, 1970.

Exhibit 286

Second Formal Interrogatories to the Defendant, State of Louisiana, dated August 19, 1970.

Exhibit 287

1. United States Fourth Formal Request for Admission, dated September 1, 1970.

2. Response to United States Fourth Formal Request for Admissions, dated September 18, 1970.

Exhibit 288

Certified copy of Diplomatic Note from the Department of State to the Charge d'Affaires ad interim of Germany, sent October 6, 1927, Files, United States Department of State.

Exhibit 289	Certified copy of a compilation of the provisions of law in force in the United States in regard to territorial waters, Files, United States Department of State.
Exhibit 290	Certified copy of a Note sent July 11, 1928, from the Department of State to the Minister of Norway, Files, United States Department of State.
Exhibit 291	Certified copy of an Inter Bureau memorandum dated December 7, 1928, Files, United States Department of State.
Exhibit 292	Certified copy of a Diplomatic Note from the Department of State to the Charge d'Affaires ad interim of Norway sent July 13, 1929, Files, United States Department of State.
Exhibit 293	Certified copy of an Aide-Memoire from the Department of State to Norwegian Embassy, sent September 29, 1949, Files, United States Department of State.
Exhibit 294	Certified copy of a Diplomatic Note from the Ambassador of Japan to the Secretary of State delivered on May 3, 1962, Files, United States Department of State.
Exhibit 295	Hawkins, Pleas of the Crown, 6th ed., 1787, p. 73.
Exhibit 296	*Hale's DeJure Maris, Hargrave's Law Tracts*, pp. 10, 11.

Exhibit 297	*Coke's Institutes*, Part 4, 1797, pp. 135, 140-141.
Exhibit 298	East, Pleas of the Crown, Vol. II, 1803, pp. 802-804.
Exhibit 299	Message of the President of the United States, Communicating the Proceedings of the Commissioners for the Adjustment of Claims under the Convention with Great Britain of February 8, 1853 (Schooner Washington), August 11, 1856, S. Exec. Doc. No. 103, 34th Cong., 1st sess. [Cong. Doc. Ser. No. 824], pp. 170-186.
Exhibit 300	*Regina* v. *Cunningham*, Bell's Crown Cases, 1858-1860, pp. 72-86.
Exhibit 301	Woolsey, *Introduction to the Study of International Law* 6th ed., (1899), pp. 76-77.
Exhibit 302	Gould, *A Treatise on the Law of Waters, Including Riparian Rights, and Public and Private Rights in Waters Tidal and Inland* (3rd ed., 1900), pp. 14-16.
Exhibit 303	Gregory, *The Recent Controversy as to the British Jurisdiction Over Foreign Fishermen More Than Three Miles from Shore: Nortensen v. Peters*, 1 Am. Pol. Sci. Rev. (1906-1907), pp. 410-437.
Exhibit 304	Fulton, *Sovereignty of the Sea*, pp. 188, 618-621, 696-698 (1911).

Exhibit 305 Hyde, *International Law Chiefly as Interpreted and Applied by the United States*, Vol. I, pp. 251-267 (1922).

Exhibit 306 Hurst, *The Territoriality of Bays*, III British Yearbook of International Law, 1922-1923, pp. 42-54.

Exhibit 307 Hurst, *Whose is the Bed of the Sea?*, IV British Yearbook of International Law (1923-1924), pp. 34-43.

Exhibit 308 Jessup, *The Law of Territorial Waters and Maritime Jurisdiction* (1927), pp. 13-18 and 355-362.

Exhibit 309 League of Nations, Acts of the Conference for the Codification of International Law, Meetings of the Committees, Vol. III (1930), pp. 218-219.

Exhibit 310 Hackworth, *Digest of International Law*, Vol. II (1941), pp. 679-680.

Exhibit 311 Vallat, Note, XXIII the British Yearbook of International Law, 1946, pp. vi, 333-338.

Exhibit 312 Lauterpacht, *Sovereignty Over Submarine Areas*, XXVII B.Y.B.I.L. (1950), pp. 376-433.

Exhibit 313 Judgment, *Fisheries Case*, I.C.J. Reports (1951), p. 116 at 163-166.

Exhibit 314 Yearbook of the International Law Commission, 1952, Vol. I, pp. 172-173, 177-178, 188-190.

Exhibit 315 Francois, *Addendum to the Second*

Report of the Regime of the Territorial Sea, U.N. Doc. A/CN.4/61/Add.1 (18 May 1953).

Exhibit 316 Yearbook of the International Law Commission, 1954, Vol. I, pp. 65, 9094, Vol. II, pp. 155-156.

Exhibit 317 Yearbook of the International Law Commission, 1956, Vol. I pp. 73-74, 205-216, 219-221, Vol. II, pp. 36-38.

Exhibit 318 Yearbook of the International Law Commission, 1956, Vol. I pp. 190-193, Vol. II, pp. 268-270.

Exhibit 319 United Nations Conference on the Law of the Sea, Official Records, Vol. III, A CONF. 13/39, 1958, pp. 144-146, 161-162, Annexes pp. 227-228, 240-242.

Exhibit 320 Status of Ratification of 1958 Convention on the Territorial Sea, 89 Cong. Rec. Part 3 (1965), pp. 10312-10313.

Exhibit 321 S. 1954, a bill to protect coastal fishery and other resources by implementing the Convention on the Territorial Sea and the Contiguous Zone, 89th Cong., 1st sess., May 12, 1965.

Exhibit 322 Judgment, North Sea Continental Shelf, I.C.J. Reports, 1969, pp. 33-36.

Exhibit 323 Letter, March 1, 1966, to Archibald Cox, Special Assistant to the U.S. Attorney General, from Paul M. Hebert,

Special Counsel to the Attorney General of Louisiana, re April 1961 Memorandum of the U.S. Coast and Geodetic Survey Presenting Recommendations on Delineation of Louisiana Coastline. Source: U.S. Department of Justice.

Exhibit 324 Letter, March 4, 1966, to Paul M. Hebert from Archibald Cox, in response to Mr. Hebert's letter of March 1, 1966. Source: U. S. Department of Justice.

Exhibit 325 Letter, March 16, 1966, to Paul M. Hebert from Archibald Cox. Source: U.S. Department of Justice.

Exhibit 326 Letter March 22, 1966, to Paul M. Hebert from George S. Swarth, Attorney, Land and Natural Resources Division, U.S. Department of Justice, transmitting Accession No. 62512 subject to terms of March 16, 1966 letter. Source: U.S. Department of Justice.

Exhibit 327 Letter, March 28, 1966, to Dean Paul M. Hebert from Archibald Cox acknowledging his letter of March 22, 1966. Source: U.S. Department of Justice.

Exhibit 328 1. Certification dated December 17, 1970, by Nancy E. Pearl, Consul of the United States of America, certifying annexed copy of Note No. 1639 of December 2, 1970,

is a true copy of the copy filed in that Embassy.

2. Certified copy of Note No. 1639 dated December 2, 1970, with enclosed letter, dated November 10, 1970, to John R. Stevenson, the Legal Adviser of the Department of State, from Shiro Kashiwa, Assistant Attorney General, U.S. Department of Justice.

Exhibit 329

1. Certification dated December 17, 1970, by Nancy E. Pearl, Consul of the United States, certifying annexed copy of Note No. 513158 of December 16, 1970, is true copy of original.
2. Certified copy of Note No. 513158 of December 16, 1970.

Exhibit 330 Department of State Translation of Note No. 513158.

Exhibit 331 Letter, November 20, 1970, to Shiro Kashiwa, from John R. Stevenson. Source: U.S. Department of Justice.

Exhibit 332

1. Letter, December 10, 1970, from Frederick Ellis to Peter Strauss, transmitting Louisiana Answers to U.S. Second Formal Interrogatories to the State of Louisiana.
2. To answers to U.S. Second Formal Interrogatories to the State of Louisiana.

Exhibit 333 Shirley and Ragsdale, eds., *Deltas in*

	Their Geologic Framework (Houston Geological Society) pp. 232-251.
Exhibit 334	United States Tariff Commission Maps prepared for the purpose of facilitating the conduct of an investigation under S. Res. 314, 71st Cong., 2d Sess. (1930).
Exhibit 335	Act No. 145, Louisiana Acts, 1942, pp. 483-495.
Exhibit 336	Act No. 385, Louisiana Acts, 1948, pp. 1040-1048.
Exhibit 337	Act No. 386, Louisiana Acts, 1948, pp. 1049-1071.
Exhibit 338	Portion of U.S.C. & G.S. Chart Number 1272, all editions and revised editions from the 9th revised edition. March 28, 1949, through the 25th edition, August 15, 1970.
Exhibit 339	Documents relating to establishment and discontinuance of navigational aids at Pass Tante Phine by Shell Oil Co., Files, U.S. Coast Guard, Eighth District, New Orleans, Louisiana.
Exhibit 340	Naval Oceanographic Office, Weekly Notice to Mariners, 44/62 and 34/66.
Exhibit 341	Letter from Philip B. Perlman, Solicitor General, to Bolivar E. Kemp, Jr., Attorney General of Louisiana, March 16, 1951, Department of Justice.

Exhibit 342	*Louisiana* v. *Dardar*, Opinion, November 8, 1970, Clerk of the Supreme Court of Louisiana.
Exhibit 343	Procedures for the Creation of a Boundary for the Maritime Zone Between Mexico and the United States in the Gulf of Mexico, Department of State.
Exhibit 344	Commander R. L. Swanson, National Oceanic and Atmospheric Administration, Report on Tidal Data Mississippi River Delta Mapping Program, (December 1970).
Exhibit 345	Data prepared by Mr. Meade, Chief, Triangulations Branch, Geodesy Division NOS, NOAA.
Exhibit 346	Wind and Weather Conditions in the Mississippi River Delta Regions, Supplemental Report, December 17, 1970, prepared by Arthur I. Cooperman.
Exhibit 347	Map of a Military Reconnaissance and Survey of the approaches to New Orleans from the Gulf of Mexico between the Mississippi and Atchafalaya Rivers. Made under the direction of Capt. Geo. W. Hughes (1842).
Exhibit 348	Chart of the Gulf of Mexico and Windward Passages including the Islands of Cuba, Haiti, Jamaica, Puerto Rico, and the Bahamas. Compiled principally from the Surveys made by order of the British, Spanish, and United States Governments.

	Published by James Imray and Son. (1865).
Exhibit 349	Measurement of the area between North Pass and Dead Women Pass (Bucket Bend Bay).
Exhibit 350	Measurement of the areas adjacent to Pass a Loutre, Southeast Pass, and South Pass.
Exhibit 351	East Bay Closing Lines illustrating the application of the Boggs formula to the closing lines described in Louisiana Exhibit 23A.
Exhibit 352	East Bay Closing Lines illustrating the application of the Boggs formula to the closing lines described in Louisiana Exhibit 197.
Exhibit 353	East Bay Closing Lines illustrating the application of the Boggs formula to the closing lines described in Louisiana Exhibit 180.
Exhibit 354	Measurement of the Caminada-Barataria Bay area.
Exhibit 355	Measurement of the Caillou Bay area.
Exhibit 355A	Replacement for U.S. Exhibit No. 355 (measurement of Caillou Bay area), with corrected bar scale.
Exhibit 356	Measurement of the Point au Fer and Shell Keys area.
Exhibit 357	Certified copy of a portion of U.S.C. & G.S. Chart No. 1272, 9th ed., re-

vised May 18, 1953, showing East Bay.

Exhibit 358 Certified copy of a portion of U.S.C. & G.S. Chart No. 1272, 9th ed., revised July 26, 1954, showing East Bay.

Exhibit 359 Certified copy of a portion of "Map of a Military Reconnaissance and Survey of the Approaches to New Orleans from the Gulf of Mexico between the Mississippi and Atchafalaya Rivers. Made under the direction of Capt. Geo. W. Hughes (1842)," showing Caillou Boca.

Exhibit 360 Certified copy of "Map of a Military Reconnaissance and Survey of the Approaches to New Orleans from the Gulf of Mexico between the Mississippi and Atchafalaya Rivers. Made under the direction of Capt. Geo. W. Hughes (1842)."

Exhibit 361 Composite of U.S.C. & G.S. Chart No. 1116, 22d ed., May 16, 1970, and part of U.S.C. & G.S. Chart No. 1115, ed. July 4, 1970.

Exhibit 362 U.S.C. & G.S. Chart No. 1273, 25th ed., August 15, 1970.

Exhibit 363 U.S.C. & G.S. Chart No. 1273, 12th ed., August 15, 1970.

Exhibit 364 U.S.C. & G.S. Chart No. 1050, 11th ed., October 3, 1970.

Exhibit 365 Certified copy of letter dated April

30, 1962, to Archibald Cox, Solicitor General and Attorney General Jack P. F. Gremillion of Louisiana, from appointed Members of the Joint Committee, Messrs. Swarth, Clement, Gumm, Atwater, Hayne, and Wilkinson, submitting its report.

Exhibit 366 Certified copy of a letter dated October 27, 1961, to Solicitor General Archibald Cox from Jack P. F. Gremillion, Attorney General of Louisiana, enclosing recent news article and press release issued thereafter.

Exhibit 367 Affidavit of Donald J. Simon, January 6, 1971.

Exhibit 368 Copy of part of Map 8 of 8, marked by James F. Richardson to show location of Shell Oil Co. navigational buoys at Pass Tante Phine.

Exhibit 369 Copy of part of U.S.C. & G.S. Chart No. 1272 (9/17/56) showing location of areas designated "6", "7", and "8" in East Bay and at South Pass.

Exhibit 370 Copy of parts of Maps 4 and 5 of 8, showing location of areas designated "6", "7", and "8" in East Bay and at South Pass.

Exhibit 371 Copy of part of U.S.C. & G.S. Chart No. 1272 (9/17/56) showing location of areas designated "3" and "9" near Pass du Bois and Tiger Pass.

Exhibit 372	Copy of parts of Maps 7 and 8 of 8, showing location of areas designated "3" and "9" near Pass du Bois and Tiger Pass.
Exhibit 373	Copy of part of U.S.C. & G.S. Hydrographic Survey No. 5824, January - May, 1935, showing Point au Fer and nearby shell reefs.
Exhibit 374	Set of 54 maps accompanying the Report of the Determination of the Contact Line of Mean Low Water of the Gulf of Mexico with the Mainland and Adjacent Islands of the State of Louisiana, dated December 20, 1961, submitted by committees appointed for that purpose. ("Committee Maps," designated 1 through 41 of 41, 1 through 8 of 8, and 1 through 5 of 5.)
Exhibit 375	Copy of parts of Maps 7 and 8 of 8 (vicinity of Pass du Bois and Tiger Pass).
Exhibit 376	List of publications by Dr. Charles R. Kolb.
Exhibit 377A	Black-and-white copy of Tariff Commission map, on base U.S.C. & G.S. Chart No. 1115, for use in Customs District 19-20.
Exhibit 377B	Black-and-white copy of Tariff Commission map, on base U.S.C. & G.S. Chart No. 1116, for use in Customs District 19-20.

Exhibit 378	List of publications by Dr. Roger T. Saucier.
Exhibit 379	Reduced scale, black-and-white composite of Committee Maps, Point au Fer to Shell Keys.
Exhibit 380	List of birdfoot deltas.
Exhibit 381	List of publications by Mr. Buford K. Meade.
Exhibit 382	Copy of page 107, League of Nations Acts of the Conference for the Codification of International Law (1930): Meetings of the Committees, Vol. III, Minutes of the Second Committee: Territorial Waters (L.N. Doc. No. C.351 (b). M. 145 (b). 1930.V.)
Exhibit 383	Copy of Document No. 19, League of Nations Conference for the Codification of International Law (1930).
Exhibit 384	United States coastline description, revised January 25, 1971.
Exhibit 385	U.S.C. & G.S. Chart No. 1274, June 6, 1970, revised through Notice to Mariners 23/70 (mounted).
Exhibit 386	U.S.C. & G.S. Chart No. 1275, June 27, 1970, revised through Notice to Mariners 26/70 (mounted).
Exhibit 387	U.S.C. & G.S. Chart No. 1276, February 14, 1970, revised through Notice to Mariners 7/70 (mounted).
Exhibit 388	U.S.C. & G.S. Chart No. 1277, July

	4, 1970, revised through Notice to Mariners 27/70.
Exhibit 389	Set of 54 Committee Maps, at reduced scale, showing the United States coastline contention.
Exhibit 389A	Three mile arc templates to accompany U.S. Exhibit 389.
Exhibit 390	Louisiana's Response to the United States Fifth Formal Request for Admissions.
Exhibit 391	Louisiana's Response to the United States Sixth Formal Request for Admissions.
Exhibit 392	Louisiana's Response to the United States Third Formal Interrogatories.
Exhibit 393	Sketch by Dr. Robert D. Hodgson, illustrating the 45° test for headlands.
Exhibit 394	Sketch illustrating alternative inner and outer headlands.
Exhibit 395	Sketch illustrating rounded headlands and a circular bay.
Exhibit 396	Sketch by Dr. Robert D. Hodgson illustrating application of the 45° test.
Exhibit 397	Sketch of a headland not associated with a bay.
Exhibit 398	Sketch by Dr. Robert D. Hodgson, illustrating selection of the entrance point on a rounded headland by use

of the bisector of the angle between lines projecting the general trend of the coast and the general trend of the water line of the indentation.

Exhibit 399 Sketch by Dr. Robert D. Hodgson, illustrating use of a 3-mile arc to ascertain shore points that affect the 3-mile limit.

Exhibit 400 Sketch illustrating treatment of an island as essentially mainland.

Exhibit 401 Sketch illustrating how differences in the shoreline affect the propriety of drawing closing lines to an island.

Exhibit 402 Sketch illustrating the effect of screening islands in reducing the area of inland waters in a bay.

BATON ROUGE HEARING

Exhibit 403 U.S. & G.S. Chart 5107, 30th ed. April 11, 1970, corrected thru NM 15/70. (With penciled closing line and application of the Boggs formula.)

Exhibit 404 Sketch of a nearly circular bay.

Exhibit 405 Sketch of a slight coastal curvature.

Exhibit 406 Sketch of a 90-degree coastal turn.

Exhibit 407 Sketch of a stair step coastal turn.

Exhibit 408 Sketch of a bay with double headlands.

Exhibit 409 Sketch of a bay with a remote coastal angle.

Exhibit 410	Sketch of a bay with a remote coastal angle.
Exhibit 411	Sketch by David Morgan of application of the semicircle test to a deep bay.
Exhibit 412	Sketch by David Morgan of an indentation that does not meet the semicircle test.
Exhibit 413	Sketch of closing lines in an interior indentation in a coastal curvature.
Exhibit 414	Sketch of small and large promentories.
Exhibit 415	Sketch of Louisiana Exhibit 338 at actual reduced scale.
Exhibit 416A	Letter of April 27, 1971 from the Geographer of the Department of State to the First Secretary of the Embassy of the Federal Republic of Germany transmitting a set of 155 charts showing the provisional baseline territorial sea and contiguous zone of the United States.
Exhibit 416B	A similar letter to Mr. E. John Cooper, Territorial Waters Office, Department of Fisheries and Forests, Dominion of Canada.
Exhibit 416C	A similar letter to Mr. R. J. Fisher, President, Pickford and Black, Ltd. Halifax Canada, with a notation that copy was sent to Mr. Andrzei Wojtowicz.

Exhibit 416D	A set of 155 maps showing the limit of the territorial sea and contiguous zone of the United States and the limit of inland waters where needed for delimitation of those lines.
Exhibit 417	Deposition of Commander R. Lawrence Swanson.
Exhibit 418	Inked drawing used in conjunction with Comm. Swanson's deposition.
Exhibit 419A	Chart No. 8 of series of charts of Norwegian coast contained in Annex 35 of the reply of the United Kingdom in the Anglo-Norwegian Fisheries Case.
Exhibit 419B	Chart No. 9 of same as above (Norwegian maps).

No. 9, Original

In the Supreme Court of the United States

OCTOBER TERM, 1974

UNITED STATES OF AMERICA,

Plaintiff,

v.

STATE OF LOUISIANA, ET AL.,

Defendants.

APPENDIX III
CLOSING LINE CONTENTIONS OF THE STATE OF LOUISIANA INCLUDING POINT TO POINT DESCRIPTION

MISSISSIPPI RIVER DELTA

By straight lines:

	X	Y
Beginning at	2742583	353754
through	2737288	345654
through	2755325	204680
through	2755178	203815
through	2754925	203475
through	2754100	186915
through	2754263	186316
through	2753885	183460
through	2752470	182170
through	2751045	181305
through	2726105	148530
through	2724850	148150
through	2702461	124148
through	2701735	123905
through	2701255	124130
through	2701003	121725
through	2701237	120486
through	2701773	118961
through	2701672	118777
through	2701421	118995
through	2701221	118945
through	2701104	118141
through	2700970	117990
through	2700786	117889
through	2700535	117889
through	2699658	116782
through	2698997	117204
through	2697850	117200
through	2609180	91445
through	2607290	93040
through	2590100	203860

through	2589100	204125
through	2587400	205250
ending at	2585000	206975

CAILLOU BAY

By straight lines:

	X	Y
Beginning at	2164477	134753
through	2162430	135112
through	2157920	135521
through	2148929	136962
through	2147751	136599
through	2143589	136276
through	2139529	136276
through	2138231	136387
through	2134210	136726
through	2133089	136940
through	2128819	138694
through	2126697	139353
through	2122523	140238
through	2118829	141971
through	2118065	142532
through	2117317	143491
ending at	2076201	189799

SHELL KEYS

By straight lines:

	X	Y
Beginning at	1845475	293595
through	1846296	293267
through	1846637	292250
through	1845817	292053
through	1845331	290564
through	1845187	289107

through	1845935	287020
through	1845633	283208
through	1844412	280498
through	1844320	278858
through	1843467	275912
through	1839563	275511
through	1838067	274547
through	1837076	273569
through	1835344	270839
through	1834019	270301
through	1833527	271423
through	1833815	273018
through	1833822	274343
through	1833848	275957
through	1834163	276830
through	1835948	277559
through	1836138	278838
through	1835397	281476
through	1833612	283982
through	1833782	284744
through	1835738	286620
through	1835246	287834
through	1833763	290104
through	1833231	292919
through	1834432	294953
through	1835042	296456
ending at	1835502	296712

SPECIFIC DISPUTED SECTOR DESCRIPTIONS

1. **In the Mississippi Delta area described in issue A-1 from Errol Shoal to the western headland of Sandy Point Bay.** If Louisiana's historic waters (including historic straight baseline claims) are not accepted by the Court, the coast line description would be as contended in U. S. Exh. 389, proceeding from the north until the first alternative claim sector is reached at Dead Women Pass (Bucket Bend Bay).

The Statement of Issues includes some specific issues relating to geomorphic contentions for particular sectors within the Mississippi Delta. Descriptions of the primary geomorphic claims for these sectors are listed below in the same order as the Statement of Issues. Where secondary alternative claims have been urged by Louisiana, they are also given.

2. **From Dead Women Pass to North Pass.** The primary Louisiana closing line (baseline) claimed here, if more outward historic waters claims are not accepted, is a closing line from X = 2,708,835, Y = 221,440 to X = 2,738,320 to Y = 210,230. Alternatively, if U. S. Exh. 416-D has any effect, Louisiana should also benefit from the additional coast line claims and three-mile projections recognized as proper in that exhibit in the vicinity of Dead Women Pass, using banks of canals or streams used as arc points but for which no coordinates are plotted on the chart in U. S. Exh. 416-D. This alternative is not intended to waive Louisiana's objection to U. S. Exh. 416-D and is by way of rebuttal only. If the coordinate

at X = 2,738,320, Y = 210,230 is not accepted as the eastern natural entrance point of Bucket Bend Bay, then in that event it should serve as an arc point and the next more inward island would certainly be, as a minimum, the suitable natural entrance point. The resultant closing line would be X = 2,708,835, Y = 221,440 to X = 2,737,065, Y = 210,155. Even if it is found that neither of the low-water elevations along the north natural levee of North Pass constitutes the natural entrance point, they are arc points and the more outward point of the technical mainland of the natural levee of North Pass found at X = 2,736,820, Y = 209,000 would justify a closing line from X = 2,708,835, Y = 221,440 to X = 2,736,820, Y = 209,000.

The enormous extent of uncounted water area of tributary water bodies within Bucket Bend Bay makes clear passage of the semicircle test obvious for whatever line might be chosen, especially given interdistributary subsidence trends.

3. **Pass a Loutre to Southeast Pass area, including Blind Bay.** The alternative claim of Louisiana in the sector of the third group of issues from Pass a Loutre to Southeast Pass under Louisiana's primary geomorphic position is a Lambert Grid coordinate description as shown below.

Here the historic inland water claim of *The Anna*, reinforced by practices of state and federal officials, and also that case's significance juridically in regard to treating mudlumps as part of the mainland, come into focus, with the description of a line extending from the

first coordinate shown below to and around the other coordinates given.

Call	X	Y
From	2,738,935	209,950
through	2,747,065	206,635
through	2,750,755	206,535
through	2,752,010	205,475
through	2,755,325	204,680
through	2,755,178	203,815
through	2,754,925	203,475
through	2,754,100	189,915
through	2,754,263	186,316
through	2,753,885	183,460
through	2,752,470	182,170
through	2,751,045	181,305
through	2,726,105	148,530
to	2,724,850	148,150

Even if Louisiana's contentions that the outermost mudlumps form natural extensions of the mainland levees and as such, natural entrance points of the inner distributary enbayments are rejected, natural entrance points of the embayments bounded by the mudlump groupings at Pass a Loutre and Southeast Pass that are more seaward than the federal contentions may be selected on more inward islands or even on the mainland. For example, if the southeast headland of the indentation between Pass a Loutre and Southeast Pass mouth is found not to be the small mudlump at X = 2,726,105, Y = 148,530 by reason of any government arguments, then certainly the substantially larger mudlump island at X = 2,725,730, Y = 149,795 would be appropriate as the natural entrance point.

4. **From Southeast Pass to South Pass including Garden Island and Redfish Bays.** The primary alternative description line here is from X = 2,724,850, Y = 148,150, to X = 2,702,461, Y = 124,148. Because of its relevance in emphasizing the interrelationship between historic waters and geomorphic alternative arguments here, we point out that this is the very sector in which "claim was given under the direction of the American ambassador . . . for territory of the United States." *The Anna* 5 C Rob. 373. This claim of territory should be understood as generally a claim of territory around the mudlump islands at the mouth of the Mississippi and not strictly limited to the precise situs of the incident involving vessels no more than Chesapeake Bay or Delaware Bay were limited as historic bays to the precise situs of the incidents that gave rise to the claims to those bays. Thus, in effect, the historic waters description based on the claim of *The Anna* should be interpreted as extending around all of the mudlumps but additionally, *The Anna* and the Supreme Court's rulings furnish legal precedent for standards for ascertaining extension of the mainland issues, for selecting the closing line of an unchallenged bay. On the latter issues, if it is not deemed appropriate to use the outermost mudlump at Southeast Pass, a more inward point for the closing line seaward of the federal admission may be used.

5. **South Pass.** The description Louisiana contends should be employed in this sector is:

	X	Y
From	2,702,461	124,148

through	2,701,735	123,905
through	2,701,255	124,130
through	2,701,003	121,725
through	2,701,237	120,486
through	2,701,773	118,961
through	2,701,672	118,777
through	2,701,421	118,995
through	2,701,221	118,945
through	2,701,104	118,141
through	2,700,970	117,990
through	2,700,786	117,889
through	2,700,535	117,889
through	2,699,658	116,782
through	2,698,997	117,204
to	2,697,850	117,200

If Louisiana's contentions on the extensions of additional mudlump islands that were not recognized in the 1959 low-water survey are not accepted, nonetheless, the additional mudlumps for certain time periods are recognized by the federal government. See description connected with what is styled "a newly formed mudlump" shown on Exh. 200 discussed at page 107 of the federal brief before the Master. The federal government had incorrectely argued

> Louisiana proposes a series of straight lines between offshore points which are not indicated as being on islands or low-tide elevations . . . .

This erroneous argument was based on an illustration which did not show the islands, because it was a summary of the lines, not the land points. The islands were not shown on that map but proven by photographs and shown on official charts until removed at the direction of counsel. We point out that *The Anna* also supports

an historic claim around mudlumps in this area, as the nature of the broad claim asserted by the American ambassador was to the areas enclosed by mudlumps. In any event, the United States agrees that the lumps should serve as arc points, as is true with all island-headland closures asserted by Louisiana, *supra*, even if closing lines are not recognized. (See three-mile projections made by the federal government off Southeast Pass on U.S. Exh. 416-D).

6. **From South Pass to Southwest Pass—East Bay.** Louisiana's historic inland waters in East Bay lie within a closing line extending from X= 2,697,850, Y = 117,200 to X = 2,609,180, Y = 91,445.

The next more inward possible closing line is the primary Louisiana juridical contention: Closing line A of La. Exh. 197 and 197A which extends from X = 2,697,850, Y = 117,200 to X = 2,624,995, Y = 108,700. If the Court determines that area measurement Method 3 (the Article 7 system of using islands and tributaries) is correct, then this closing line should be employed even to the present. Prior to the September 17, 1956 chart revision, line A satisfied Method 1 area measurement, so if Method 1 is the only approved method, still Line A should be employed for the accounting covering the period June 5, 1950 until the revision of Chart 1272 dated September 17, 1956.

Closing line B, La. Exh. 197, extending from X = 2,685,325, Y = 133,800 to X = 2,644,940, Y = 134,910 (slightly different if 1970 changes are employed, see La. Exh. 197) would be employed after

September 17, 1956 if Method 3 area measurement were rejected and Method 2 accepted.

Closing line B' would be appropriate for the period since September 17, 1956 if a more outward line is not approved and even if Methods 3 and 2 of area measurement are rejected. It satisfied the Method 1 semicircle test. It is slightly more seaward than line C' or line C because it employs as its eastern headland not the inner tip of Cowhorn Island but the outermost natural entrance point on Cowhorn Island, selected by the bisector of the angle method. Thus, its use depends on approval of that headland selection method for the point shown on Figure 13 of Louisiana's *Brief in Support of the Exceptions to the Report of the Special Master filed July 31, 1974*. Thus, the eastern headland is situated at approximately latitude 29°00′45″N, longitude 89°11′30″W. Its western headland, if the 1959 low-water survey is employed, is found at X = 2,644,940, Y = 134,910. If the charts are employed, its western headland is the tip of the spit paralleling Southwest Pass at approximately latitude 29°00′48″N, longitude 89°19′24″W, shown on the September 17, 1956 and September 17, 1962 editions of Chart 1272.

Closing line C' is appropriate if a more outward line is not used and even if Methods 3 and 2 are rejected. It would be appropriate for the time period commencing with the August 15, 1970 revision of Chart 1272 to the present, if it is decided to recognize the August 15, 1970 chart revision along Southwest Pass, but not to give it effect as to Cowhorn Island

because of inadequacy of the post-hurricane survey work to disprove its continued existence. It would run from the innermost tip of Cowhorn Island, X = 2,677,-650, Y = 138,050 to a point of land at approximately latitude 29°00′22″N, longitude 89°19′51″W as may be located on the August 15, 1970 edition of Chart 1272. See Figure 12 of Louisiana's *Brief in Support of the Exceptions to the Report of the Special Master filed July 31, 1974.*

Closing line C, La. Exh. 197, extending from X = 2,677,650, Y = 138,050, to X = 2,644,940, Y = 134,910, recognized by the Special Master, Report at 34, satisfied even Method 1 and should be utilized if the more outward closing lines are rejected. Its existence should be recognized for the period Cowhorn Island's existence is recognized, as it uses the innermost tip of Cowhorn Island as a headland. It employs as a base map a composite of the Set of 54 Maps as shown in La. Exh. 197, and uses the 1959 low-water survey, which surveyed the shore of East Bay as it existed in November 1959. Line C, prior to the 1959 low-water survey, existed more seawardly, due to the shorter length of the spit which parallels Southwest Pass. Therefore, for the period prior to 1959, if a more seaward line is not recognized, line C's location would be as shown and claimed on the September 17, 1956 chart overlay in La. Exh. 180, with a western headland which is the same as B' line at approximate latitude 29°00′48″N, longitude 89°19′24″W.

Closing line D, La. Exh. 197, extending from

X = 2,672,315, Y = 141,745 to X = 2,644,940, Y = 134,910 must be employed in the absence of the application of a more outward closing line.

7. **From Southwest Pass to Belle Pass: Ascension—Caminada—Barataria Bay complex.** Ascension Bay is an overlarge bay within the meaning of the Convention and Louisiana draws a 24-mile fallback line within it from Empire Canal to a point west of Caminada Pass, i.e. from X = 2,550,402, Y = 216,158 to X = 2,406,890, Y = 189,733. With this determination, the Master concurs. See Report at 46.

The areas covered by issues 8-10 of the Statement of Issues, reprinted as Appendix A-1 of the Master's Report, involve either uncontroverted matters or minor disputes concerning survey or chart questions, plus bayou or small bay mouth issues. Some of these issues are moot under the Master's Ascension Bay findings. Louisiana has taken exception only to the survey or chart questions treated in paragraphs (c) through (e), Report at 47. These pertain to the period of existence of certain low-water lines. Louisiana maintains that the low-water lines of paragraphs (c) through (e) should be recognized even to the present and used as base points for the application of the ruling in paragraph (b), Report at 47, calling for use of the low-water line.

11. **Caillou Bay.** Commencing at X = 2,164,477, Y = 134,753 and proceeding westerly, the historic waters closing line descriptions given *supra* accords

with Louisiana's juridical-geomorphic bay description. Upon a finding that the Special Master too-narrowly construed his authority in the area of Caillou Bay, the closing line found by the Special Master after a full evidentiary hearing, Report at 51, should be employed.

12. **Atchafalaya Bay.** As shown on La. Exh. 194, the closing line here should be from X = 1,987,371, Y = 241,272 to X = 1,855,055, Y = 296,154, but as found by the Master, Report at 52, more outward points on islands or low-water elevations should be given effect as arc points under prior decisions of the Court, 409 U.S. 17.